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UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

SALEHA ABDULLAH, on behalf of herself and all similarly situated persons,

Case No.

Plaintiff,
v.

COMPLAINT

CLASS ACTION

DISNEY DTC LLC, a Delaware limited liability company,

Defendant.

I. NATURE OF THE ACTION

1. Defendant DISNEY DTC LLC, a Delaware limited liability company (referred to herein as “Defendant” or “DISNEY”) owns and operates a website, www.espn.com (the “Website”).

2. This is a class action lawsuit brought by Plaintiff SALEHA ABDULLAH (“Plaintiff”) on behalf of herself and on behalf of all California residents who have accessed the Website (“Class Members”).

3. Plaintiff files this class action complaint on behalf of herself and all others similarly situated (the “Class Members”) against Defendant. Plaintiff brings this action based upon personal knowledge of the facts pertaining to her, and on information and belief as to all other matters, by and through the investigation of undersigned counsel.

4. A pixel tracker, also known as a web beacon, is a tracking mechanism embedded in a website that monitors user interactions. It typically appears as a small, transparent 1x1 image or a lightweight JavaScript snippet that activates when a webpage is loaded or a user performs a tracked action.

5. When triggered, the pixel transmits data from the user's browser to a third-party server. This data typically includes page views, session duration, referrer URLs, IP address, browser and device details, and other interaction metadata.

6. When users visit the Website, Defendant causes tracking technologies to be installed, executed, embedded, or injected in visitors' browsers. These include, but are not limited to, the following:

- Google Ads / DoubleClick / Tag Manager Tracker
- Rubicon / Magnite Tracker
- Comscore Tracker

7. The third parties who operate the above-listed trackers use pieces of User Information (defined below) collected via the Website as described herein for their own independent purposes tied to broader advertising ecosystems, profiling, and data

1 monetization strategies that go beyond Defendant's direct needs for their own financial
2 gain. The above-listed trackers are referred to herein collectively as the "Trackers."

3 8. The trackers present on Defendant's Website include technologies operated
4 by major third-party advertising, bid-exchange, and audience-measurement companies,
5 specifically Google LLC (Google Ads, DoubleClick, and Google Tag Manager),
6 Magnite, Inc. (formerly Rubicon Project), and Comscore, Inc. (ScorecardResearch).
7 Defendant embeds and enables these technologies on the Website, causing Plaintiff's
8 browser to transmit signaling, routing, addressing, device, and behavioral information
9 directly to these Third Parties' servers. These transmissions allow Google's advertising
10 ecosystem to perform targeted advertising, retargeting, and real-time bidding; enable
11 Magnite's exchange infrastructure to ingest identifiers and bid-stream metadata for
12 auction and profiling purposes; and permit Comscore to collect audience-measurement,
13 behavioral, and device-level information for analytics, segmentation, and downstream
14 data products within the ad-tech ecosystem. Magnite, Inc. and Comscore, Inc. are both
15 registered data brokers in California.

16 9. Plaintiff is informed and believes, and thereon alleges, that Defendant has
17 additionally implemented third-party audience-measurement and behavioral-tracking
18 technologies operated by Nielsen (including Nielsen's digital measurement and tagging
19 infrastructure). These technologies function as third-party listeners that activate upon
20 user interaction with the Website and receive users' signaling, routing, addressing,
21 device, and behavioral information. Plaintiff is informed and believes that Nielsen uses
22 this data to generate audience-measurement metrics, construct behavioral segments, and
23 associate users with pseudonymous identifiers within its cross-site analytics and
24 measurement ecosystem, operating in the same manner as the other Trackers alleged
25 herein. The Nielsen Company is a registered California data broker.

26 10. Through the Trackers, the Third Parties collect detailed user information
27 including IP addresses, browser and device type, screen resolution, operating system,
28 pages visited, session duration, scroll depth, mouse movements, click behavior, referring

URLs, unique identifiers (such as cookies and ad IDs), and geolocation based on IP. This information is used for behavioral profiling, ad targeting, cross-device tracking, and participation in real-time advertising auctions (collectively, “User Information”).

11. Because the Trackers capture and transmit users' IP addresses, full page URLs, referrer headers, device identifiers, and other non-content metadata, they function as "pen registers" and/or "trap and trace devices" under Cal. Penal Code § 638.50. These tools silently collect routing and addressing information for commercial use without user interaction, as defined in *Greenley v. Kochava, Inc.*, 2023 WL 4833466 (S.D. Cal. July 27, 2023).

12. Plaintiff and the Class Members did not consent to the installation, execution, embedding, or injection of the Trackers on their devices and did not expect their behavioral data to be disclosed or monetized in this way. By installing and using the Trackers without prior consent and without a court order, Defendant violated CIPA section 638.51.

13. By installing and activating the Trackers without obtaining user consent or a valid court order, Defendant violated California Penal Code § 638.51, which prohibits the use of pen registers and trap and trace devices.

14. Plaintiff brings this action to prevent Defendant from further violating the privacy rights of California residents.

15. Generalized references herein to users, visitors and consumers expressly include Plaintiff and the Class Members.

II. PARTIES

16. Plaintiff SALEHA ABDULLAH is a California citizen residing in Contra Costa County and has an intent to remain there. Plaintiff was in California when she visited the Website, which occurred during the class period prior to the filing of the complaint in this matter. The allegations set forth herein are based on the Website as configured when Plaintiff visited it.

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1 17. DISNEY DTC LLC is a Delaware limited liability company that owns,
2 operates, and/or controls the Website which is an online platform that offers online
3 services and digital content to consumers.

4 18. DISNEY owns and operates the Website (www.espn.com), which serves
5 as the primary consumer-facing digital platform for ESPN, a leading global sports media
6 and entertainment brand, in the United States. Through the Website, DISNEY provides
7 millions of users with live and archived sports content, breaking news, scores, standings,
8 statistics, fantasy-sports tools, streaming integrations, and advertising-supported digital
9 media experiences.

10 19. While ESPN content is distributed across multiple channels, including
11 mobile applications and connected television interfaces, the Website independently
12 provides a full suite of digital publishing, advertising, and audience-engagement
13 services. The Website is responsible for delivering customized sports coverage, serving
14 advertising inventory, and integrating with ESPN's subscription and streaming
15 infrastructure, including ESPN+. In operating this digital media platform, DISNEY
16 collects and processes substantial volumes of user data for purposes that include content
17 personalization, ad-delivery optimization, audience measurement, behavioral analytics,
18 and digital advertising.

19 20. The Website functions as ESPN's primary digital storefront and media
20 distribution hub. It allows users to access real-time sports scores, watch highlights, read
21 articles, log into subscriber accounts, manage fantasy sports teams, and stream
22 programming through linked ESPN services. In addition to these content-distribution
23 functions, the Website also operates as a data-collection and behavioral-tracking
24 platform controlled by DISNEY through which user interactions are monitored, profiled,
25 and monetized within ESPN's advertising ecosystem.

26 21. Through the deployment of third-party tracking technologies, including
27 advertising pixels, event-tracking scripts, device-fingerprinting tools, audience-
28 measurement tags, and programmatic advertising integrations, DISNEY collects

1 granular data about user interactions with the Website. These data practices form a core
2 component of ESPN's performance marketing, ad targeting, cross-platform analytics,
3 and audience-monetization strategies, enabling DISNEY and its advertising partners to
4 deliver targeted advertising, measure engagement, and construct user-level behavioral
5 profiles.

6 **III. JURISTICTION AND VENUE**

7 22. This Court has subject matter jurisdiction over this action pursuant to the
8 Class Action Fairness Act of 2005, 28 U.S.C. § 1332(d)(2), because the total matter in
9 controversy exceeds \$5,000,000 and there are over 100 members of the proposed class.
10 Further, at least one member of the proposed class is a citizen of a State within the United
11 States and at least one defendant is the citizen or subject of a foreign state.

12 23. DISNEY does business at 500 South Buena Vista Street, Burbank,
13 California 91521 according to its Website Terms of Use, which is a direct admission of
14 continuous business operations at a California address.

15 24. Venue is proper in the Northern District of California pursuant to 28 U.S.C.
16 § 1391 because Defendant (1) is authorized to conduct business in this District and has
17 intentionally availed itself of the laws and markets within this District; (2) does
18 substantial business within this District; (3) Plaintiff resides in this District; and (4) the
19 injury to Plaintiff occurred within this District

20 **IV. GENERAL ALLEGATIONS**

21 **A. The California Invasion of Privacy Act (CIPA)**

22 25. Enacted in 1967, the California Invasion of Privacy Act is a legislative
23 measure designed to safeguard the privacy rights of California residents by prohibiting
24 unauthorized wiretapping and eavesdropping on private communications. The California
25 Legislature recognized the significant threat posed by emerging surveillance
26 technologies, stating that “the development of new devices and techniques for the
27 purpose of eavesdropping upon private communications ... has created a serious threat

1 to the free exercise of personal liberties and cannot be tolerated in a free and civilized
2 society.” Cal. Penal Code § 630.

3 26. CIPA specifically prohibits the installation or use of “pen registers” and
4 “trap and trace devices” without consent or a court order. Cal. Penal Code § 638.51(a).

5 27. A “pen register” is defined as “a device or process that records or decodes
6 dialing, routing, addressing, or signaling information transmitted by an instrument or
7 facility from which a wire or electronic communication is transmitted,” excluding the
8 contents of the communication. Cal. Penal Code § 638.50(b).

9 28. Conversely, a “trap and trace device” is a device or process that captures
10 “incoming electronic or other impulses that identify the originating number or other
11 dialing, routing, addressing, or signaling information reasonably likely to identify the
12 source of a wire or electronic communication,” again excluding the contents. Cal. Penal
13 Code § 638.50(b).

14 29. In practical terms, a pen register is a device or process that records outgoing
15 dialing information, while a trap and trace device is a device or process that records
16 incoming dialing information.

17 30. Historically, law enforcement has utilized these devices to monitor
18 telephone calls, with pen registers recording outgoing phone numbers dialed from a
19 specific line and trap and trace devices recording the phone numbers of incoming calls
20 to that line.

21 31. Although originally focused on landline telephone calls, CIPA’s scope has
22 expanded to encompass various forms of communication, including cell phones and
23 online interactions. For instance, if a user sends an email, a pen register could record the
24 sender’s email address, the recipient’s email address, and the subject line, essentially
25 capturing the user’s outgoing information.

26 32. Similarly, if the user receives an email, a trap and trace device could record
27 the sender’s email address, the recipient’s email address, and the subject line, capturing
28 the incoming information.

1 33. Despite predating the Internet, CIPA has been interpreted by the California
 2 Supreme Court to apply to new technologies where such application does not conflict
 3 with the statutory scheme. *In re Google Inc.*, 2013 WL 5423918, at *21 (N.D. Cal. Sep.
 4 26, 2013); see also, e.g., *Shah v. Fandom, Inc.*, 754 F. Supp. 3d 924, 930 (N.D. Cal. 2024)
 5 (finding trackers similar to those at issue here were “pen registers” and noting
 6 “California courts do not read California statutes as limiting themselves to the traditional
 7 technologies or models in place at the time the statutes were enacted”); *Mirmalek v. Los
 8 Angeles Times Communications LLC*, 2024 WL 5102709, at *3-4 (N.D. Cal. Dec. 12,
 9 2024) (same); *Moody v. C2 Educ. Sys. Inc.* 742F. Supp. 3d 1072, 1076 (C.D. Cal. 2024)
 10 (“Plaintiff’s allegations that the TikTok Software is embedded in the Website and
 11 collects information from visitors plausibly fall within the scope of §§ 638.50 and
 12 638.51.”); *Greenley*, *supra*, at 1050 (referencing CIPA’s “expansive language” when
 13 finding software was a “pen register”); *Javier v. Assurance IQ, LLC*, 2022 WL 1744107,
 14 at *1 (9th Cir. May 31, 2022) (“Though written in terms of wiretapping, [CIPA] Section
 15 631(a) applies to Internet communications. This interpretation aligns with the principle
 16 that CIPA should be construed to provide the greatest privacy protection when faced
 17 with multiple possible interpretations. *Matera v. Google Inc.*, 2016 WL 8200619, at *19
 18 (N.D. Cal. Aug. 12, 2016).

19 34. The conduct alleged herein constitutes a violation of a legally protected
 20 privacy interest that is both concrete and particularized. Invasions of privacy have long
 21 been actionable under common law. *Patel v. Facebook*, 932 F.3d 1264, 1272 (9th Cir.
 22 2019); *Eichenberger v. ESPN, Inc.*, 876 F.3d 979, 983 (9th Cir. 2017).

23 35. Both the legislative history and statutory language indicate that the
 24 California Legislature intended CIPA to protect core privacy rights. Courts have found
 25 that violations of CIPA give rise to concrete injuries sufficient to confer standing under
 26 Article III. See *Campbell v. Facebook, Inc.*, 2020 WL 1023350; *In re Facebook Internet
 27 Tracking Litig.*, 956 F.3d 589 (9th Cir. 2020).

28 / / /

1 36. Individuals may pursue legal action against violators of any CIPA
2 provision, including Section 638.51, and are entitled to seek \$5,000 in statutory penalties
3 per violation. Cal. Penal Code § 637.2(a)(1).

4 **B. The Trackers Are “Pen Registers” and/or “Trap and Trace Devices”**

5 37. When the Plaintiff and Class Members accessed the Website, their browsers
6 initiated an HTTP or HTTPS request or “GET” request to Defendant’s web server, which
7 hosts the content and functionality of the site. In response, the server transmitted an
8 HTTP response containing the necessary resources, including HTML, cascading style
9 sheets (CSS), JavaScript files, and image assets, used by the browser to render and
10 display the webpage. These resources also included client-side scripts that initiate
11 communication with third-party services for analytics, marketing, and tracking purposes.
12 The server’s instructions include how to properly display the Website, e.g., what images
13 to load, what text should appear, or what music should play.

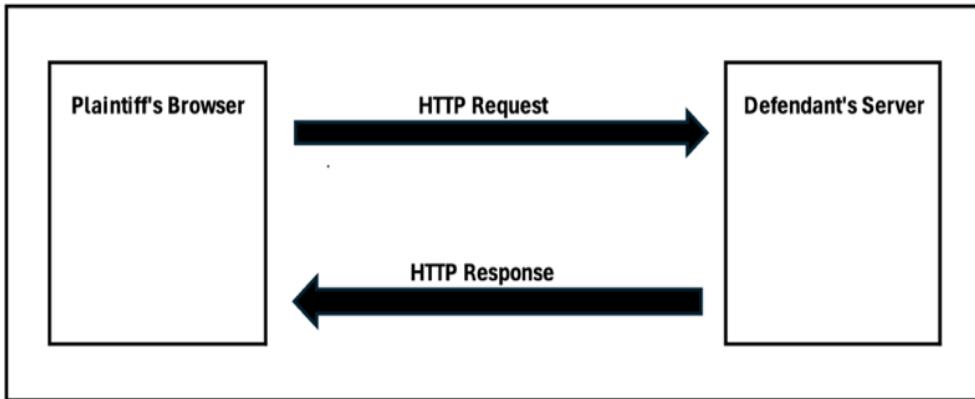
14 38. In addition, the server’s instructions included client-side scripts that initiate
15 communication with third-party services for analytics, marketing, and tracking purposes.
16 The instructions cause the Trackers to be installed on a user’s browser. The Trackers
17 then cause the browser to send identifying information—including the user’s IP address
18 and User Information to the Third Parties. These Third Parties, through their Trackers,
19 also set cookies on Website users’ browsers, which sends a unique identifier to these
20 Third Parties that allows them to track users on the Website over multiple visits and
21 across the Internet.

22 39. A general diagram of this process is pictured at Figure 1, which explains
23 how Defendant’s Website transmits instructions back to users’ browsers in response to
24 HTTP requests.

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Figure 1:
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10 40. The server's response included third-party tracking scripts that were
 11 executed by the Plaintiff's and Class Members' web browsers. These scripts, once
 12 executed, initiate client-side functions that capture routing and behavioral metadata and
 13 transmit this data, typically via HTTPS requests, to the servers of third-party tracking
 14 vendors. These actions occur without visible indicators or user awareness. The
 15 transmitted data, the User Information, is used to profile users and facilitate targeted
 16 advertising.

17 41. The Trackers operate by initiating HTTP or HTTPS requests using either
 18 the GET or POST method from the user's browser to external servers controlled by the
 19 Third Parties. These requests are triggered by user interactions with the Website and are
 20 used to transmit behavioral data and Device Metadata, including information such as
 21 page views, click events, session duration, and identifying browser characteristics.

22 42. Plaintiff and Class Members did not provide their prior consent to
 23 Defendant to install the Trackers on their browsers or use the Trackers. Nor did
 24 Defendant obtain a court order before installing or using the Trackers.

25 43. An IP address is a numerical identifier assigned to each device or network
 26 connected to the Internet, used to facilitate communication between systems. *See hiQ*
Labs, Inc. v. LinkedIn Corp., (9th Cir. 2019) 938 F.3d 985, 991 n.4. The most common
 27 format, known as IPv4, consists of four numbers separated by periods (e.g.,
 28

1 191.145.132.123). IPv4 is the traditional format of IP addresses and, because it has a
 2 finite amount of combinations, it is limited to approximately 4.3 billion addresses.
 3 Because this proved to be insufficient as the Internet grew, IPv6 was introduced. IPv6
 4 offers a vastly larger address space with 340 undecillion possible addresses. While IPv6
 5 adoption has been increasing, many networks still rely on IPv4.¹

6 44. Much like a telephone number, an IP address guides or routes an intentional
 7 communication signal (*i.e.*, a data packet) from one device to another. An IP address is
 8 essential for identifying a device on the internet or within a local network, facilitating
 9 smooth communication between devices. IP addresses can be used via external
 10 geolocation services to infer a user's general location, including state, city, approximate
 11 latitude and longitude, and in some cases, ZIP code.

12 45. Public IP addresses are globally unique identifiers assigned by Internet
 13 Service Providers ("ISPs") that allow devices to communicate directly over the Internet.
 14 They are globally accessible, meaning they can be reached from anywhere on the
 15 Internet, but are not inherently exposed unless data is being transmitted. Public IP
 16 addresses are essential for devices requiring direct Internet access.

17 46. Public IP addresses can be used to determine the approximate physical
 18 location of a device. For example, services like iplocation.io, use databases that map IP
 19 addresses to geographic areas, often providing information about the country, city,
 20 approximate latitude and longitude coordinates, or even the internet service provider
 21 associated with the public IP. This geolocation capability is leveraged by online
 22 advertising and user identification services.

23 47. In contrast, private IP addresses are used within internal networks and are
 24 not routable on the public Internet. The Internet Assigned Numbers Authority ("IANA")
 25 reserves specific ranges of numbers to be exclusively used for private IP addresses (*e.g.*,

26 ¹ See, *e.g.*, *What is the Internet Protocol*, CLOUDFLARE,
 27 [https://www.cloudflare.com/learning/
 network-layer/internet-protocol/](https://www.cloudflare.com/learning/network-layer/internet-protocol/); Stefano Gridelli, *What is an RFC1918 Address?*,
 28 NETBEEZ (Jan. 22, 2020), <https://netbeez.net/blog/rfc1918/>.

1 172.16.0.0 through 172.31.255.255). They are isolated from the global Internet and can
2 be reused across different networks without conflict. For example, a home network in
3 New York and an office network in Tokyo can both use the same private IP address (*e.g.*,
4 192.168.1.1) for their routers without conflict.

5 48. The distinction between a public and private IP address is fundamental to
6 the architecture of modern networks. Public IP addresses facilitate global
7 communication, while private IP addresses conserve the finite amount of combinations
8 to make an IP address through local network communication. And crucially, a private IP
9 address does not divulge a user's geolocation, whereas a public IP address does and is
10 thus extensively used in advertising.

11 49. An analogy is useful. A public IP address is like the number for a landline
12 telephone for a household. A private IP address is like each handset that is connected to
13 that landline number (*e.g.*, "Handset #1," "Handset #2"). A lot can be gleaned from
14 knowing the phone number that is making the call, while knowing Handset #1 versus
15 Handset #2 is making a call provides additional information.

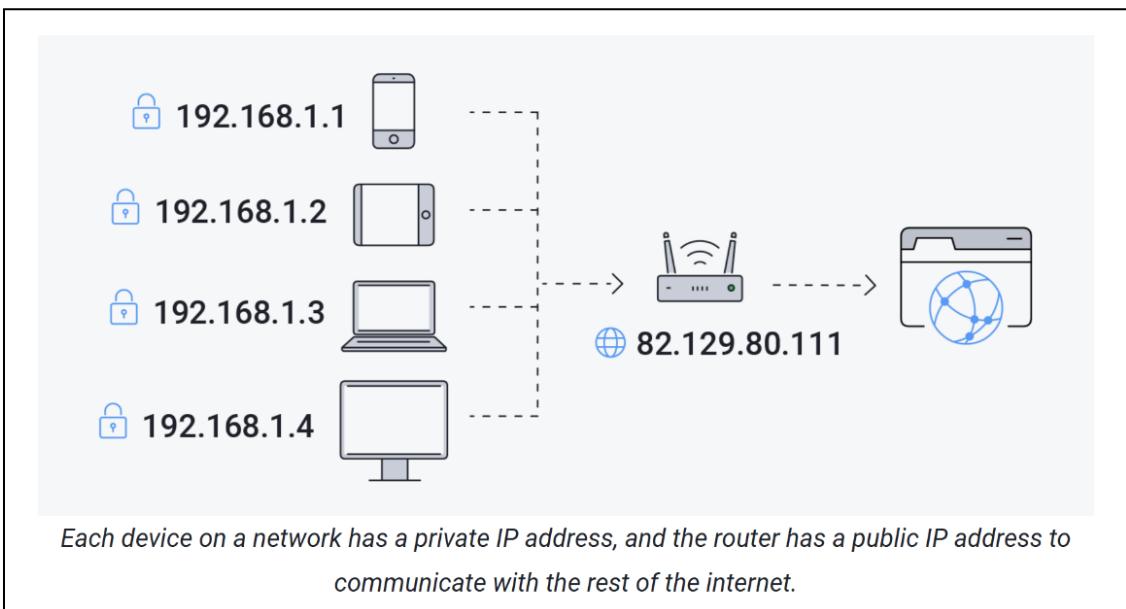
16 50. The same is true of IP addresses. The public IP address divulges the
17 approximate location of the user that is connecting to the Internet and the router directing
18 those communications (presumably the user's house or workplace), and it is the means
19 through which the user actually communicates with the website and the Internet at large.
20 The private IP address then distinguishes between the devices accessing the same public
21 IP address.²

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² While the Trackers do not collect private IP addresses, as discussed below, the
25 Trackers also collect Device Metadata, which distinguishes between devices
26 accessing the same public IP address. So, by installing the Trackers on Website
27 users' browsers, Defendant allows third parties to collect information that is
28 analogous to a telephone number (the public IP address) and the specific handset that
is making the call (the "Device Metadata").

Figure 2:



51. Thus, the differences between public and private IP addresses are as follows:³

Figure 3:

Category	Private IP address	Public IP address
Scope	The private IP address only has a local scope in your own network.	The public IP address's scope is global.
Communication	It is used so devices within a network can communicate with each other.	It allows access to the internet and is used for communication outside of your own network.
Uniqueness	It's an address from a smaller range that's used by other devices in other local networks.	It's a unique address that's not used by other devices on the internet.
Provider	The router assigns a private IP address to a specific device on the local network.	The internet service provider assigns the public IP address.
Range	Private IP address ranges: 10.0.0.0 – 10.255.255.255, 172.16.0.0 – 172.31.255.255, 192.168.0.0 – 192.168.255.255	Any IP address that isn't within a private IP address range.

³ WHAT'S THE DIFFERENCE BETWEEN A PUBLIC AND PRIVATE IP ADDRESS?, AVIRA (Jan. 31, 2024), <https://www.avira.com/en/blog/public-vs-private-ip-address>.

1 52. A public IP address is therefore “routing, addressing, or signaling
 2 information.” A public IP address functions as “routing, addressing, or signaling
 3 information” by facilitating internet communication. It provides essential information
 4 that can help determine the general geographic coordinates of a user accessing a website
 5 through geolocation databases. Additionally, a public IP address is involved in routing
 6 communications from the user’s router to the intended destination, ensuring that emails,
 7 websites, streaming content, and other data reach the user correctly.

8 53. As “routing, addressing, or signaling information,” a public IP address is
 9 indispensable for maintaining seamless and efficient communication over the Internet.
 10 It ensures that data packets are sent from the user’s router to the intended destination,
 11 such as a website or email server.

12 54. A public IP address is “addressing” information because it determines the
 13 general geographic coordinates of the user who is accessing a website.

14 55. A public IP address is “routing” or “signaling” information because it is
 15 sending or directing the user’s communication from the router in their home or work to
 16 the website they are communicating with, and ensuring that “emails, websites, streaming
 17 content, and other data reaches you correctly.”⁴

18 56. Through a public IP address, a device’s state, city, zip code, and
 19 approximate latitude and longitude can be determined. Thus, knowing a user’s public IP
 20 address and therefore geographical location “provide[s] a level of specificity previously
 21 unfound in marketing.”⁵

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⁴ Anthony Freda, *Private IP vs Public IP: What’s the Difference?*, AVG (June 4, 2021), <https://www.avg.com/en/signal/public-vs-private-ip-address>.

⁵ *IP Targeting: Understanding This Essential Marketing Tool*, ACCUDATA (Nov. 20, 2023), <https://www.accudata.com/blog/ip-targeting/>.

1 57. A public IP address allows advertisers to (i) “[t]arget [customers by]
 2 countries, cities, neighborhoods, and ... postal code”⁶ and (ii) “to target specific
 3 households, businesses[,] and even individuals with ads that are relevant to their
 4 interests.”⁷ Indeed, “IP targeting is one of the most targeted marketing techniques
 5 [companies] can employ to spread the word about [a] product or service”⁸ because
 6 “[c]ompanies can use an IP address ... to personally identify individuals.”⁹

7 58. In fact, a public IP address is a common identifier used for “geomarketing,”
 8 which is “the practice of using location data to identify and serve marketing messages to
 9 a highly-targeted audience. Essentially, geomarketing allows [websites] to better serve
 10 [their] audience by giving [them] an inside look into where they are, where they have
 11 been, and what kinds of products or services will appeal to their needs.”¹⁰ For example,
 12 for a job fair in specific city, companies can send advertisements to only those in the
 13 general location of the upcoming event.¹¹

14 59. “IP targeting is a highly effective digital advertising technique that allows
 15 you to deliver ads to specific physical addresses based on their internet protocol (IP)
 16

17 ⁶ *Location-Based Targeting That Puts You in Control*, CHOOZLE,
 18 [https://choozle.com/
 19 geotargeting-strategies/](https://choozle.com/geotargeting-strategies/).

20 ⁷ Herbert Williams, *The Benefits of IP Address Targeting for Local Businesses*,
 21 LINKEDIN (Nov. 29, 2023), <https://tinyurl.com/c2ne77ua>.

22 ⁸ *IP Targeting: Understanding This Essential Marketing Tool*, ACCUDATA (Nov. 20,
 23 2023), <https://www.accudata.com/blog/ip-targeting/>.

24 ⁹ Trey Titone, *The Future Of IP Address As An Advertising Identifier*, AD TECH
 25 EXPLAINED (May 16, 2022), [https://adtechexplained.com/the-future-of-ip-address-as-
 27 an-advertising-identifier/](https://adtechexplained.com/the-future-of-ip-address-as-

 26 an-advertising-identifier/).

28 ¹⁰ See, e.g., *The Essential Guide to Geomarketing: Strategies, Tips & More*, DEEP
 29 SYNC (Nov. 20, 2023), <https://deepsync.com/geomarketing/>.

30 ¹¹ See, e.g., *Personalize Your Website And Digital Marketing Using IP Address*,
 31 GEOFLI, [https://geofli.com/blog/how-to-use-ip-address-data-to-personalize-your-
 33 website-and-digital-marketing-campaigns](https://geofli.com/blog/how-to-use-ip-address-data-to-personalize-your-

 32 website-and-digital-marketing-campaigns).

1 address. IP targeting technology works by matching physical addresses to IP addresses,
 2 allowing advertisers to serve ads to specific households or businesses based on their
 3 location.”¹²

4 60. “IP targeting capabilities are highly precise, with an accuracy rate of over
 5 95%. This means that advertisers can deliver highly targeted ads to specific households
 6 or businesses, rather than relying on more general demographics or behavioral data.”¹³

7 61. In addition to “reach[ing] their target audience with greater precision,”
 8 businesses are incentivized to use a customer’s public IP address because it “can be more
 9 cost-effective than other forms of advertising.”¹⁴ “By targeting specific households or
 10 businesses, businesses can avoid wasting money on ads that are unlikely to be seen by
 11 their target audience.”¹⁵

12 62. In addition, “IP address targeting can help businesses to improve their
 13 overall marketing strategy.”¹⁶ “By analyzing data on which households or businesses
 14 are responding to their ads, businesses can refine their targeting strategy and improve
 15 their overall marketing efforts.”¹⁷

16 63. The collection of IP addresses here is particularly invasive here: As a report
 17 from NATO found:

18
 19 [a] data broker may receive information about a[] [website] user,
 20 including his ... IP address. The user then opens the [website]

21 ¹² *IP Targeting*, SAVANT DSP, https://www.savantdsp.com/ip-targeting?gad_source=1&gclid=Cj0KCQjw1Yy5BhD-ARIsAI0RbXZJKJSqMI6p1xAxyqai1WhAiXRJTbX8qYhNuEvIfSCJ4jfOV5-5maUaAgtNEALw_wcB.

22 ¹³ *Id.*

23 ¹⁴ Herbert Williams, *The Benefits of IP Address Targeting for Local Businesses*,
 24 LINKEDIN (Nov. 29, 2023), <https://www.linkedin.com/pulse/benefits-ip-address-targeting-local-businesses-herbert-williams-z7bhf>.

25 ¹⁵ *Id.*

26 ¹⁶ *Id.*

27 ¹⁷ *Id.*

1 while his phone is connected to his home Wi-Fi network. When
 2 this happens, the data broker can use the IP address of the home
 3 network to identify the user's home, and append this to the
 4 unique profile it is compiling about the user. If the user has a
 5 computer connected to the same network, this computer will
 6 have the same IP address. The data broker can then use the IP
 7 address to connect the computer to the same user, and identify
 8 that user when their IP address makes requests on other publisher
 9 pages within their ad network. Now the data broker knows that
 the same individual is using both the phone and the computer,
 which allows it to track behavior across devices and target the
 user and their devices with ads on different networks.¹⁸

10 64. In other words, not only does the collection of IP addresses by the Third
 11 Parties cause harm in and of itself, data brokers use IP addresses to identify users, append
 12 the IP address to a unique profile containing even more information about the user,
 13 attach specific IP addresses to comprehensive user profiles, and track Plaintiff and Class
 14 Members across the Internet using their IP addresses, compiling vast reams of other
 15 personal information in the process.

16 65. For these reasons, under Europe's General Data Protection Regulation, IP
 17 addresses are considered "personal data, as they can potentially be used to identify an
 18 individual."¹⁹

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21 ¹⁸ HENRIK TWETMAN & GUNDARS BERGMANIS-KORATS, NATO STRATEGIC
 22 COMMUNICATIONS CENTRE OF EXCELLENCE, DATA BROKERS AND SECURITY at 11
 23 (2020), https://stratcomcoe.org/cuploads/pfiles/data_brokers_and_security_20-01-2020.pdf.

24 ¹⁹ IS AN IP ADDRESS PERSONAL DATA?, CONVESIO,
 25 <https://convesio.com/knowledgebase/article/is-an-ip-address-personal-data/>; *see also*
 26 WHAT IS PERSONAL DATA?, EUROPEAN COMMISSION,
 27 https://commission.europa.eu/law/law-topic/data-protection/reform/what-personal-data_en.

1 66. When companies build their websites, they install or integrate various third-
 2 party scripts into the code of the website in order to collect data from users or perform
 3 other functions.²⁰

4 67. Often times, third-party scripts are installed on websites “for advertising
 5 purposes.”²¹

6 68. Further, “[i]f the same third-party tracker is present on many sites, it can
 7 build a more complete profile of the user over time.”²²

8 69. Defendant has long incorporated the Trackers’ code into the code of its
 9 Website, including when Plaintiff and Class Members visited the Website. Thus, when
 10 Plaintiff visited the Website, the Website caused the Trackers to be installed on
 11 Plaintiff’s and other users’ browsers.

12 70. As described below, when a user visits the Website, the Website’s code as
 13 programmed by Defendant installs the Trackers onto the user’s browser. This allows the
 14 Third Parties through their respective Trackers to collect Plaintiff’s and Class Members’
 15 IP addresses, Device Metadata, and User Information, and pervasively track them across
 16 the Internet.

17 71. Public IP addresses play a significant role in digital marketing by enabling
 18 geographic targeting based on a user’s approximate location. Through IP geolocation
 19 services, advertisers can often determine a user’s country, region, city, and in some
 20 cases, ZIP code or service area. In contexts where a static IP address is associated with
 21 a fixed residence or business, this data can contribute to household-level or business-

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23 ²⁰ See *Third-party Tracking*, PIWI, <https://piwik.pro/glossary/third-party-tracking/>
 24 (“Third-party tracking refers to the practice by which a tracker, other than the
 25 website directly visited by the user, traces or assists in tracking the user’s visit to the
 26 site. Third-party trackers are snippets of code that are present on multiple websites.
 27 They collect and send information about a user’s browsing history to other
 28 companies...”).

²¹ *Id.*

²² *Id.*

1 level targeting, particularly when combined with other tracking identifiers and third-
2 party enrichment.

3 72. Defendant and the Third Parties then use the public IP addresses, Device
4 Metadata, User Information, and other information of Website visitors that are collected
5 and set by the Trackers, including those of Plaintiff and Class Members, to deanonymize
6 Plaintiff and Class Members, serve hyper-targeted advertisements, and unjustly enrich
7 themselves through this improperly collected information. Defendant installs Trackers
8 on users' browsers to collect User Information, including IP addresses and full URLs,
9 which constitute outgoing routing and addressing metadata under CIPA. These
10 identifiers serve the same function as telephony dialed numbers and therefore meet the
11 statutory definition of a pen register or trap and trace device.

12 73. At no time prior to the installation and use of the Trackers on Plaintiff's and
13 Class Members' browsers, or prior to the use of the Trackers, did Defendant procure
14 Plaintiff's and Class Members' consent for such conduct. Nor did Defendant obtain a
15 court order to install or use the Trackers.

16 **C. The Use of Trackers or Beacons and Digital Fingerprinting**

17 74. Website users typically expect a degree of anonymity when browsing,
18 particularly when they are not logged into an account. However, upon visiting the
19 Website, Plaintiff's and Class Members' browsers executed third-party tracking scripts
20 embedded by the Defendant. These Trackers operate in the background of the browsing
21 session and collect detailed behavioral and technical information, which is then
22 transmitted to external third-party servers without the users' active awareness.

23 75. The Trackers also causes additional data points to be sent from Plaintiff's
24 and Class Members' browser to the Third Parties, which are meant to uniquely identify
25 users across sessions and devices. In addition to the public IP address, key elements
26 include the user-agent string (browser, operating system, and device type) and device
27 capabilities such as supported image formats and compression methods. Persistent
28 identifiers like the PUID, GUID, UID, PSVID, and User-Agent ensure users can be

1 tracked even after clearing standard session data like cookies. Advanced methods like
2 fingerprinting and server-side matching remain unaffected by cookie deletion.
3 Combined, these elements form a detailed, unique fingerprint that allows for cross-site
4 tracking and behavioral profiling.

5 76. This process, known as digital fingerprinting, involves compiling various
6 data points such as browser version, screen resolution, installed fonts, device type, and
7 language settings to generate a unique identifier for each user. Fingerprinting can be used
8 to recognize repeat visits and correlate activity across different sessions or sites. When
9 combined with form inputs, login activity, or third-party enrichment, fingerprinting can
10 contribute to broader profiling of a user's interests, affiliations, or behaviors.

11 77. When combined with additional tracking mechanisms such as cookies,
12 login data, and third-party enrichment services, fingerprinting contributes to user
13 profiling. This may include inferring location, browsing habits, consumer preferences,
14 and potentially associating these patterns with known user identities. A sufficiently
15 detailed digital fingerprint especially when correlated with other identifiers such as email
16 addresses, form submissions, or third-party databases, can enable the reidentification of
17 a user.

18 78. The ability to associate a persistent digital profile with a specific individual
19 using techniques such as digital fingerprinting has led to the development of a data
20 industry known as identity resolution. Identity resolution involves recognizing users
21 across sessions, devices, and platforms by connecting various identifiers derived from
22 their digital behavior, including IP addresses, browser metadata, cookies, and, in some
23 cases, login credentials. The process may occur deterministically (based on known
24 logins or user-submitted information) or probabilistically (based on behavioral or
25 technical similarity).

26 79. In simpler terms, pen register and trap and trace mechanisms, in the digital
27 context, refer to technologies that record metadata such as IP addresses, URLs visited,
28 and device characteristics, information that identifies the routing and addressing of

1 electronic communications. This can be achieved through the deployment of tracking
 2 technologies like the Trackers installed, executed, embedded, or injected in the Website,
 3 which operate without user interaction or visibility.

4 80. The Trackers provide analytics and marketing services to Defendant using
 5 the data collected from visitors to the Website when they visited the Website and from
 6 when they visited other websites that included the pen register and trap and trace devices.

7 81. When users visit the Website, installed, executed, embedded or injected
 8 Trackers initiate network requests to third-party servers, using invisible image pixels,
 9 JavaScript calls, or beacon APIs. These requests include the user's IP address, which is
 10 transmitted automatically as part of the HTTP request header. In many cases, the
 11 Tracker's server responds by placing a persistent cookie in the user's browser, which
 12 serves as a unique identifier that can be used to recognize and track the user across future
 13 visits. If a user deletes their browser cookies, this identifier is removed. However, upon
 14 revisiting the Website, the process repeats: the browser executes the Tracker's script, a
 15 new identifier is set, and the Tracker resumes collecting the user's IP address and
 16 associated behavioral data.

17 **D. Plaintiff and Class Members' Data Has Financial Value**

18 82. Given the number of Internet users, the "world's most valuable resource is
 19 no longer oil, but data."²³

20 83. Consumers' web browsing histories have an economic value of more than
 21 \$52 per year, while their contact information is worth at least \$4.20 per year, and their
 22 demographic information is worth at least \$3.00 per year.²⁴

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24 ²³ Ian Cohen, Are Web-Tracking Tools Putting Your Company at Risk?, Forbes (Oct
 19, 2022), <https://www.forbes.com/sites/forbestechcouncil/2022/10/19/are-web-tracking-tools-putting-your-company-at-risk/?sh=26481de07444>.

25 ²⁴ *In re Facebook Internet Tracking Litig.*, 140 F. Supp. 3d 922, 928 (N.D. Cal.
 26 2015), rev'd, 956 F.3rd 589 (9th Cir. 2020).

1 84. There is a “a study that values users’ browsing histories at \$52 per year, as
 2 well as research panels that pay participants for access to their browsing histories.”²⁵

3 85. Extracted personal data can be used to design products, platforms, and
 4 marketing techniques. A study by the McKinsey global consultancy concluded that
 5 businesses that “leverage customer behavior insights outperform peers by 85 percent in
 6 sales growth and more than 25 percent in gross margin.”²⁶

7 86. In 2013, the Organization for Economic Cooperation and Development
 8 (“OECD”) estimated that data trafficking markets had begun pricing personal data,
 9 including those obtained in illicit ways without personal consent. It found that illegal
 10 markets in personal data valued each credit cardholder record at between 1 and 30 U.S.
 11 dollars in 2009, while bank account records were valued at up to 850 U.S. dollars. Data
 12 brokers sell customer profiles of the sort that an online retailer might collect and maintain
 13 for about 55 U.S. dollars, and that individual points of personal data ranged in price from
 14 \$0.50 cents for an address, \$2 for a birthday, \$8 for a social security number, \$3 for a
 15 driver’s license number, and \$35 for a military record (which includes a birth date, an
 16 identification number, a career assignment, height, weight, and other information).
 17 Experiments asking individuals in the United States and elsewhere how much they value
 18 their personal data points result in estimates of up to \$6 for purchasing activity, and
 19 \$150-240 per credit card number or social security number.²⁷

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21 25 *In re Facebook, Inc. Internet Tracking Litigation* (9th Cir. 2020) 956 F.3rd 589,
 22 600.

23 26 Brad Brown, Kumar Kanagasabai, Prashant Pant & Goncalo Serpa Pinto,
 24 Capturing value from your customer data, McKinsey (Mar. 15, 2017),
 25 <https://www.mckinsey.com/businessfunctions/quantumblack/ourinsights/capturing-value-from-your-customer-data>.

26 27 Exploring the Economics of Personal Data: A Survey of Methodologies for
 27 Measuring Monetary Value, OECD Digital Economy Papers, No. 220 (Apr. 2,
 28 2013), at 27-28, <https://www.oecdilibrary.org/docserver/5k486qtxldmq-en.pdf>.

87. The last estimate probably reflects public reporting that identify theft affecting a credit card number or social security number can result in financial losses of up to \$10,200 per victim.²⁸

88. Data harvesting is one of the fastest growing industries in the country, with estimates suggesting that internet companies earned \$202 per American user in 2018 from mining and selling data. That figure is expected to increase with estimates for 2022 as high as \$434 per use, reflecting a more than \$200 billion industry.

89. The Defendant’s monetization of personal data constitutes actionable economic harm under federal law, even without evidence of a direct financial loss, as a “misappropriation-like injury” caused by converting user data into a revenue stream through targeted advertising. *In re Facebook, Inc. Internet Tracking Litigation*, 956 F.3d 589 (9th Cir. 2020).

E. Defendant Is Motivated To Monetize Consumer Information Regardless of Consent

90. By implementing Trackers on the Website, Defendant participates in building detailed behavioral profiles of visitors. These profiles include information such as which users viewed specific products, whether they initiated but abandoned the checkout process, and what pages or buttons they interacted with. This data enables Defendant and its advertising partners to identify repeat visits from the same device or browser. This behavioral data is integrated into third-party advertising platforms, allowing Defendant to deliver retargeted ads to users who previously visited the Website, offer promotional incentives to users who showed purchase intent, and build “lookalike audiences” that target users with similar behaviors or characteristics. These practices significantly improve advertising efficiency and increase the likelihood of converting user engagement into actual sales.

²⁸ Bradley J. Fikes, Identity Theft Hits Millions, Report Says, San Diego Union Tribune, Sept. 4, 2003, <https://www.sandiegouniontribune.com/sdut-identity-theft-hits-millions-report-says-2003sep04-story.html>.

1 91. Defendant has a strong financial incentive to deploy the Trackers on its
2 Website without obtaining user consent. By enabling the collection of IP addresses and
3 device-level identifiers through these technologies, Defendant facilitates integration into
4 real-time bidding ecosystems. These systems rely on bidstream data such as IP address,
5 device type, screen resolution, and referral information to assess the value of a potential
6 ad impression. This enables Defendant and its partners to participate in data-driven ad
7 targeting, increase the value of its advertising inventory, and track users across sessions
8 and websites, all of which provide economic benefit despite the privacy implications to
9 users.

10 92. IP addresses are a valuable data point in digital advertising and tracking
11 systems. They can be used to approximate a user's geographic location, often down to
12 the city or ZIP code level, enabling location-based targeting. When combined with
13 cookies, browser metadata, and device identifiers, IP addresses contribute to persistent
14 user tracking across sessions and websites. They also assist advertisers and data brokers
15 in linking anonymous browsing activity to existing user profiles, which enhances ad
16 targeting precision and increases the commercial value of each tracked interaction. IP
17 addresses therefore constitute "routing, addressing, or signaling information" protected
18 under CIPA § 638.50(b).

19 93. When users' data is collected without meaningful consent and monetized,
20 they lose control over who can access, use, or distribute their personal information. Data
21 brokers and ad tech firms aggregate and correlate identifiers such as IP addresses, device
22 IDs, and cookies with other personal data to construct detailed consumer profiles.
23 Information initially gathered in one context, such as browsing a retail website, is
24 frequently repurposed for unrelated uses and sold to third parties without the user's
25 awareness. This results in pervasive surveillance, where users are continuously tracked
26 across multiple websites, applications, and devices, often without their knowledge or
27 ability to opt out.

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F. Defendant's Conduct Constitutes An Invasion of Plaintiff's and Class Members' Privacy

94. The collection of Plaintiff's and Class Members' personally identifying, de-anonymized information through Defendant's installation and use of the Trackers constitutes an invasion of privacy.

95. As alleged herein, the Trackers are designed to conduct targeted advertising and boost Defendant's revenue, all through their surreptitious collection of Plaintiff's and Class Members' personal information.

96. To put the invasiveness of Defendant's violations of the CIPA into perspective, it is also important to understand three concepts: data brokers, real-time bidding, and cookie syncing.

97. In short, the import of these concepts is that: (i) the Third Parties are data brokers (or partner with data brokers) that collect user information from Website visitors to uniquely identify and de-anonymize users by combining their IP addresses, Device Metadata, User Information, and unique user ID values with whatever information those Third Parties have on a user from other sources; (ii) the Third Parties share that information with other entities to create the most complete user profile they can (through cookie syncing), which includes a more complete and non-anonymous portrait of the user; and (iii) those profiles are offered up for sale through the real-time bidding process to the benefit of Defendant and the Third Parties and to the detriment of users' privacy interests.

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1 **1. Data Brokers and Real-Timing Bidding: The Information**
 2 **Economy**

3 *Data Brokers*

4 98. While “[t]here is no single, agreed-upon definition of data brokers in United
 5 States law,”²⁹ California law defines a “data broker” as “a business that knowingly
 6 collects and sells to third parties the personal information of a consumer with whom the
 7 business does not have a direct [i.e., consumer-facing] relationship,” subject to certain
 8 exceptions. Cal. Civ. Code § 1798.99.80(c).

9 99. Any entity that qualifies as a “data broker” under California law must
 10 specifically register as such Cal. Civ. Code § 1798.99.82(a). The Comscore, Nielsen
 11 and Magnite trackers employed by Defendant on the Website are operated by registered
 12 California data brokers.

13 100. “Data brokers typically offer pre-packaged databases of information to
 14 potential buyers,” either through the “outright s[ale of] data on individuals” or by
 15 “licens[ing] and otherwise shar[ing] the data with third parties.”³⁰ Such databases are
 16 extensive, and can “not only include information publicly available [such as] from
 17 Facebook but also the user’s exact residential address, date and year of birth, and
 18 political affiliation,” in addition to “inferences [that] can be made from the combined
 19 data.”³¹

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22 ²⁹ JUSTIN SHERMAN, DUKE SANFORD CYBER POLICY PROGRAM, DATA BROKERS AND
 23 SENSITIVE DATA ON U.S. INDIVIDUALS: THREATS TO AMERICAN CIVIL RIGHTS,
 24 NATIONAL SECURITY, AND DEMOCRACY, at 2 (DUKE SANFORD CYBER POLICY
 25 PROGRAM, 2021), <https://tinyurl.com/hy9fewhs>.

26 ³⁰ SHERMAN, *supra*, at 2.

27 ³¹ Tehila Minkus et al., *The City Privacy Attack: Combining Social Media and*
 28 *Public Records for Detailed Profiles of Adults and Children*, COSN ‘15:
 29 PROCEEDINGS OF THE 2015 ACM ON CONFERENCE ON ONLINE SOCIAL NETWORKS 71,
 30 71 (2015), [https://dl.acm.org/doi/pdf/10.1145/](https://dl.acm.org/doi/pdf/10.1145/2817946.2817957)
 31 2817946.2817957.

1 101. For instance, the NATO report noted that data brokers collect two sets of
 2 information: “observed and inferred (or modelled).” The former “is data that has been
 3 collected and is actual,” such as websites visited.” Inferred data “is gleaned from
 4 observed data by modelling or profiling,” meaning what users may be expected to do.
 5 On top of this, “[b]rokers typically collect not only what they immediately need or can
 6 use, but hoover up as much information as possible to compile comprehensive data sets
 7 that might have some future use.”³²

8 102. Likewise, a report by the Duke Sanford Cyber Policy Program “examine[d]
 9 10 major data brokers and the highly sensitive data they hold on U.S. individuals.”³³
 10 The report found that “data brokers are openly and explicitly advertising data for sale on
 11 U.S. individuals’ sensitive demographic information, on U.S. individuals’ political
 12 preferences and beliefs, on U.S. individuals’ whereabouts and even real-time GPS
 13 locations, on current and former U.S. military personnel, and on current U.S. government
 14 employees.”³⁴

15 103. This data collection has grave implications for Americans’ right to privacy.
 16 For instance, “U.S. federal agencies from the Federal Bureau of Investigation [] to U.S.
 17 Immigration and Customs Enforcement [] purchase data from data brokers—without
 18 warrants, public disclosures, or robust oversight—to carry out everything from criminal
 19 investigations to deportations.”³⁵

20 104. As another example:

21 Data brokers also hold highly sensitive data on U.S. individuals
 22 such as race, ethnicity, gender, sexual orientation, immigration
 23 status, income level, and political preferences and beliefs (like
 24 support for the NAACP or National LGBTQ Task Force) that
 25 can be used to directly undermine individuals’ civil rights. Even
 if data brokers do not explicitly advertise these types of data

26 ³² TWETMAN & BERGMANIS-KORATS, *supra*, at 11.

27 ³³ SHERMAN, *supra*, at 1.

28 ³⁴ *Id.*

28 ³⁵ *Id.* at 9.

1 (though in many cases they do), everything from media reporting
 2 to testimony by a Federal Trade Commission commissioner has
 3 identified the risk that data brokers use their data sets to make
 4 “predictions” or “inferences” about this kind of sensitive
 5 information (race, gender, sexual orientation, etc.) on
 6 individuals.

7 This data can be used by commercial entities within the U.S. to
 8 discriminately target goods and services, akin to how Facebook
 9 advertising tools allow advertisers to exclude certain groups,
 10 such as those who are identified as people with disabilities or
 11 those who are identified as Black or Latino, from seeing
 12 advertisements. Many industries from health insurance to life
 13 insurance to banking to e-commerce purchase data from data
 14 brokers to run advertisements and target their services.

15 ...

16 Given identified discrimination problems in machine learning
 17 algorithms, there is great risk of these predictive tools only
 18 further driving up costs of goods and services (from insurance to
 19 housing) for minority groups.³⁶

20 105. Similarly, as the report from NATO noted, corporate data brokers cause
 21 numerous privacy harms, including but not limited to depriving users of the right to
 22 control who does and does not acquire their personal information, unwanted
 23 advertisements that can even go as far as manipulating viewpoints, and spam and
 24 phishing attacks.³⁷

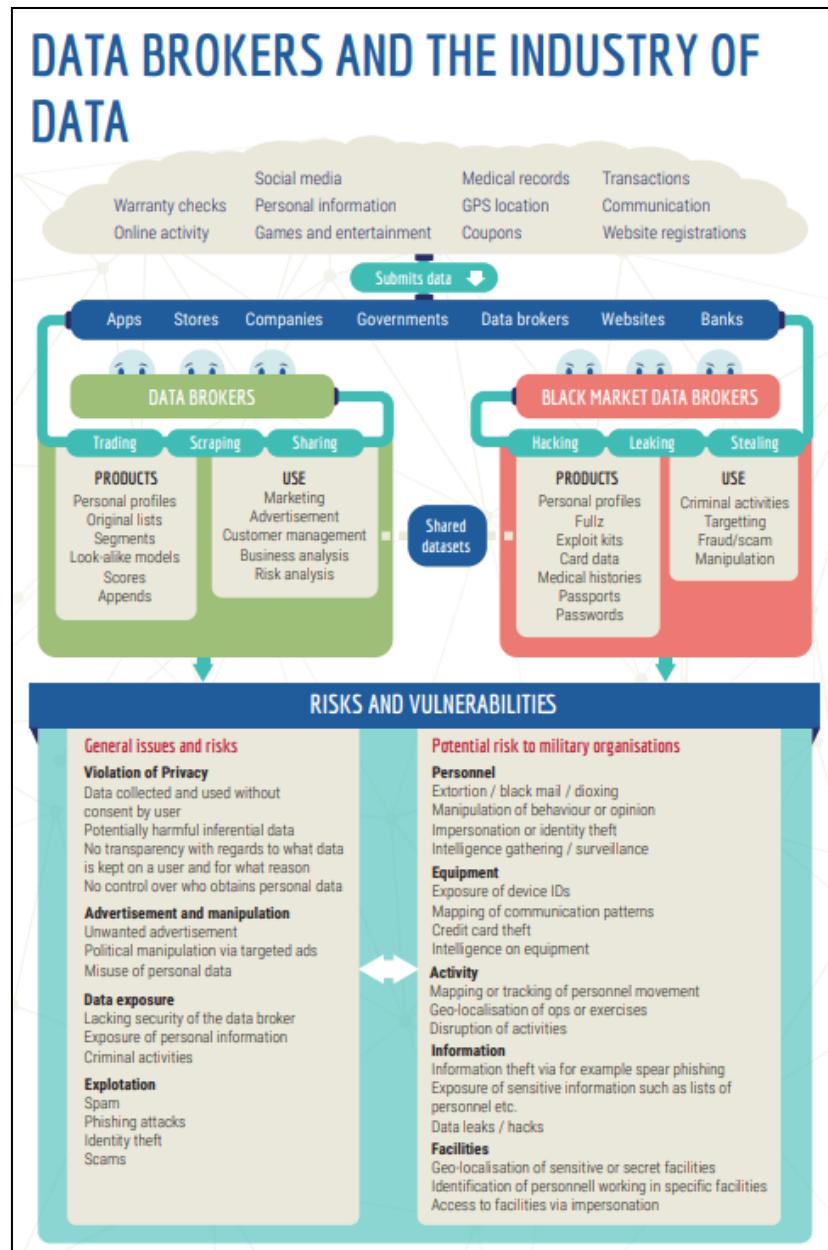
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28³⁶ *Id.*

³⁷ TWETMAN & BERGMANIS-KORATS, *supra*, at 8.

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Figure 4:

106. As noted above, data brokers are able to compile such wide swaths of information in part by collecting users' IP addresses, Device Metadata, and User Information, which is used by data brokers to track users across the Internet.³⁸

107. // /

108 ³⁸ *Id.* at 11.

1 107. Indeed, as McAfee (a data security company) notes, “data brokers can ...
 2 even place trackers or cookies on your browsers ... [that] track your IP address and
 3 browsing history, which third parties can exploit.”³⁹

4 108. These data brokers will then:

5 take that data and pair it with other data they’ve collected about
 6 you, pool it together with other data they’ve got on you, and then
 7 share all of it with businesses who want to market to you. They
 8 can eventually build large datasets about you with things like:
 9 “browsed gym shorts, vegan, living in Los Angeles, income
 10 between \$65k-90k, traveler, and single.” Then, they sort you into
 11 groups of other people like you, so they can sell those lists of
 12 like-people and generate their income.⁴⁰

13 109. In short, by collecting IP addresses, Device Metadata, and User
 14 Information, data brokers and many of the entities the Third Parties sync with can track
 15 users across the Internet, compiling various bits of information about users, building
 16 comprehensive user profiles that include an assortment of information, interests, and
 17 inferences, and offering up that information for sale to the highest bidder. The “highest
 18 bidder” is a literal term, as explained below.

19 110. As a result of Defendant’s installation of trackers operated by data brokers
 20 such as Comscore, Nielsen and Magnite, together with numerous third parties with
 21 which those brokers synchronize, the information of Plaintiff and Class Members is
 22 appended to existing profiles maintained by those brokers or used to generate new ones.
 23 This linkage is accomplished through the collection of IP addresses, device metadata,
 24 and other user information transmitted by the browsers of Defendant’s Website visitors.

25 111. These profiles are then served up to any companies that want to advertise
 26 on Defendant’s Website, and Defendant’s users become more valuable as a result of

27 ³⁹ Jasdev Dhaliwal, *How Data Brokers Sell Your Identity*, McAFFEE (June 4, 2024),
 28 <https://www.mcafee.com/blogs/tips-tricks/how-data-brokers-sell-your-identity/>.

29 ⁴⁰ Paul Jarvis, *The Problem with Data Brokers: Targeted Ads and Your Privacy*,
 30 FATHOM ANALYTICS (May 10, 2022), <https://usefathom.com/blog/data-brokers>.

1 having their IP addresses, Device Metadata, and User Information linked to these data
 2 broker profiles. Thus, Defendant is unjustly enriched through advertising revenue by
 3 installing the Trackers on Plaintiff's and Class Members' browsers, and thus, enabling
 4 the Third Parties to collect Plaintiff's and Class Members' IP addresses, Device
 5 Metadata, and User Information without consent.

6 *Real-Time Bidding*

7 112. Once data brokers and many of the entities the Third Parties sync with
 8 collect Website users' IP addresses, Device Metadata, and User Information, how do
 9 they "sell" or otherwise help Defendant monetize that information? This is where real-
 10 time bidding comes in.

11 113. "Real Time Bidding (RTB) is an online advertising auction that uses
 12 sensitive personal information to facilitate the process to determine which digital ad will
 13 be displayed to a user on a given website or application."⁴¹

14 114. "There are three types of platforms involved in an RTB auction: Supply
 15 Side Platforms (SSPs), Advertising Exchanges, and Demand Side Platforms (DSPs)." An SSP work[s] with website or app publishers to help them participate in the RTB
 16 process." "DSPs primarily work with advertisers to help them "[r]each relevant
 17 audiences on the open internet, drive growth, and prove your impact."⁴² And an
 18 Advertising Exchange "allows advertisers and publishers to use the same technological
 19 platform, services, and methods, and 'speak the same language' in order to exchange
 20 data, set prices, and ultimately serve an ad."⁴³

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 25 ⁴¹ Sara Geoghegan, *What is Real Time Bidding?*, ELECTRONIC PRIVACY
 INFORMATION CENTER (Jan. 15, 2025), <https://epic.org/what-is-real-time-bidding/>.

26 ⁴² *Id.*

27 ⁴³ *Introducing To Ad Serving*, MICROSOFT IGNITE (Mar. 3, 2024),
 28 <https://learn.microsoft.com/en-us/xandr/industry-reference/introduction-to-ad-serving>.

1 115. In other words, SSPs provide user information to advertisers that might be
2 interested in those users, DSPs help advertisers select which users to advertise and target,
3 and an Advertising Exchange is the platform on which all of this happens.

4 116. The RTB process works as follows:

5 After a user loads a website or app, an SSP will send user data to
6 Advertising Exchanges ... The user data, often referred to as
7 "bidstream data," contains information like device identifiers, IP
8 address, zip/postal code, GPS location, browsing history,
9 location data, and more. After receiving the bidstream data, an
10 Advertising Exchange will broadcast the data to several DSPs
11 [here, *e.g.*, DoubleClick]. The DSPs will then examine the
12 broadcasted data to determine whether to make a bid on behalf
13 of their client.

14 Ultimately, if the DSP wins the bid, its client's advertisement
15 will appear to the user. Since most RTB auctions are held on the
16 server/exchange side, instead of the client/browser side, the user
17 only actually sees the winner of the auction and would not be
18 aware of the DSPs who bid and lost. But even the losing DSPs
19 still benefit because they also receive and collect the user data
20 broadcasted during the RTB auction process. This information
21 can be added to existing dossiers DSPs have on a user.⁴⁴

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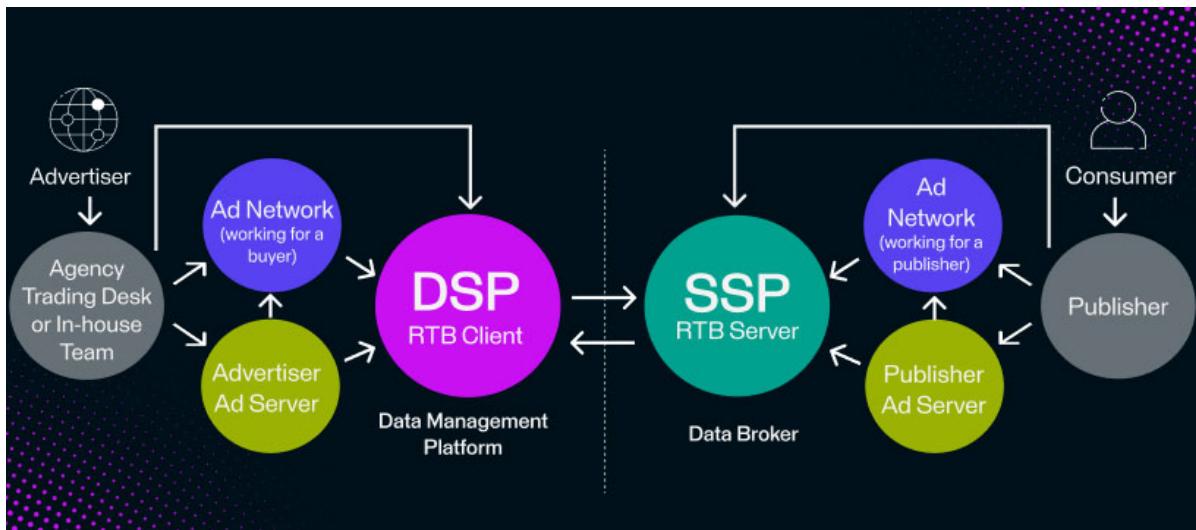
26 ⁴⁴ Geoghegan, *supra*; *see also* REAL-TIME BIDDING, APPSFLYER,
27 [https://www.appsflyer.com/
glossary/real-time-bidding/](https://www.appsflyer.com/glossary/real-time-bidding/).

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Figure 5:

117. Facilitating this real-time bidding process means SSPs and DSPs must have as much information as possible about Defendant's users to procure the greatest interest from advertisers and the highest bids. These entities receive assistance because Defendant also installs the trackers of data brokers on its users' browsers:

15 the economic incentives of an auction mean that DSP [or SSP] with more specific knowledge of individuals will win desirable viewers due to being able to target them more specifically and out-bid other entities. As a consequence, the bid request is not the end of the road. The DSP enlists a final actor, the data management platform (DMP) [or a data broker]. DSPs [or SSPs] send bid requests to DMPs [and data brokers], who enrich them by attempting to identify the user in the request and use a variety of data sources, such as those uploaded by the advertiser, collected from other sources, or bought from data brokers. The DSP with the highest bid not only wins the right to deliver the ad—through the SSP—to the individual. The DSP also wins the right to cookie sync its own cookies with those from the [Advertising Exchange], thus enabling easier linkage of the data to the user's profile in the future.⁴⁵

⁴⁵ Michael Veale & Federik Zuiderveen Borgesius, *Adtech and Real-Time Bidding under European Data Protection Law*, 23 GERMAN L. J. 226, 232-33 (2022) <https://tinyurl.com/yjddt5ey>.

Figure 6:

118. In other words, SSPs can solicit the highest bids for Website users by identifying and de-anonymizing those users by combining the information they know about that user with the information other data brokers know about that user. If there is a match, then the SSPs will have significantly more information to provide about users, and that will solicit significantly higher bids from prospective advertisers (because the advertisers will have more information about the user to target their bids).

119. Likewise, a DSP can generate the highest and most targeted bids from advertisers with providing those advertisers with as much information about users as possible, which it does by syncing with data brokers who, in turn, sync with other data brokers and/or are data brokers themselves.

120. All of this naturally enriches Defendant, as its users have now become more valuable thanks to the replete information the Third Parties are able to provide about users.

121. As the Federal Trade Commission (“FTC”) has noted, “[t]he use of real-time bidding presents potential concerns,” including but not limited to:

- 27 a. “incentiviz[ing] invasive data-sharing” by “push[ing] 28 publishers [i.e., Defendant] to share as much end-user data as possible to get higher valuation for their ad

1 inventory—particularly their location data and cookie
 2 cache, which can be used to ascertain a person’s
 3 browsing history and behavior.”

4 b. “send[ing] sensitive data across geographic borders.”
 5 c. sending consumer data “to potentially dozens of bidders
 6 simultaneously, despite only one of those parties—the
 7 winning bidder actually using that data to serve a targeted
 8 ad. Experts have previously cautioned that there are few
 9 (if any) technical controls ensuring those other parties do
 10 not retain that data for use in unintended ways.”⁴⁶

11 122. The Electronic Privacy Information Center (“EPIC”) has warned that
 12 “[c]onsumers’ privacy is violated when entities disclose their information without
 13 authorization or in ways that thwart their expectations.”⁴⁷

14 123. For these reasons, some have characterized “real-time bidding” as “[t]he
 15 biggest data breach ever recorded” because of the shear number of entities that receive
 16 personal information⁴⁸:

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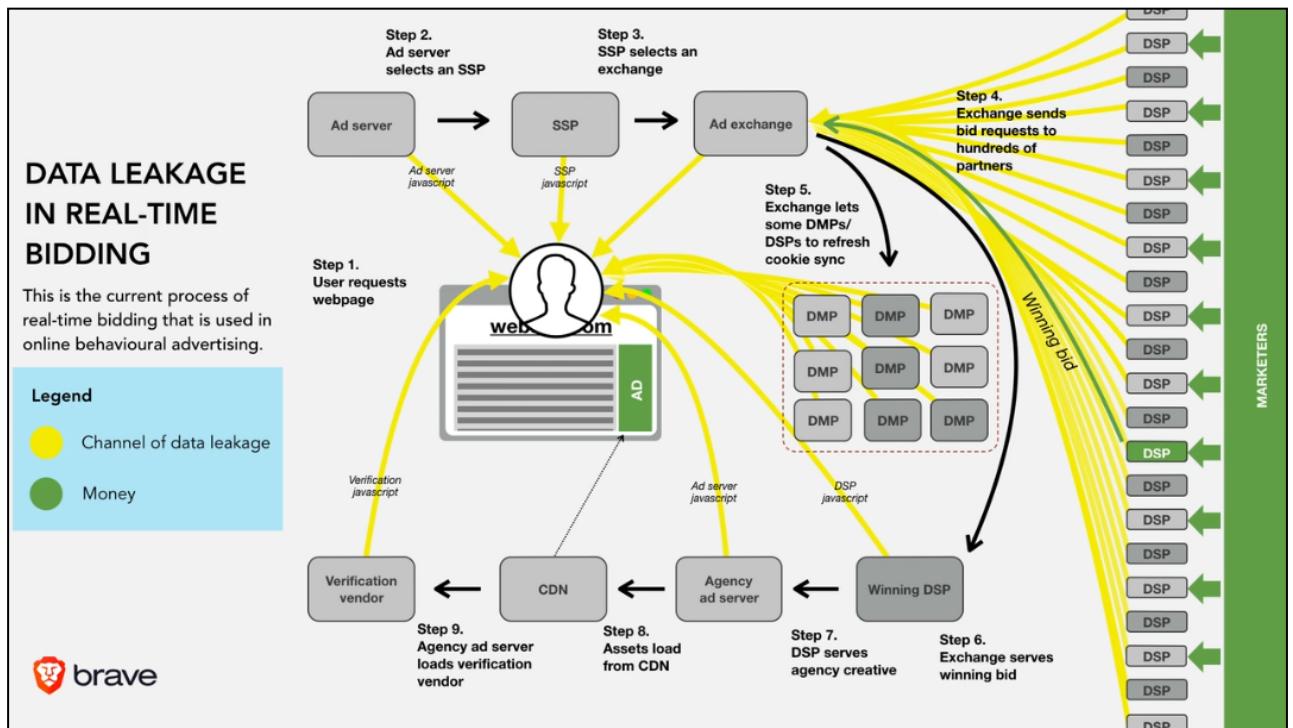
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22 ⁴⁶ FEDERAL TRADE COMMISSION, UNPACKING REAL TIME BIDDING THROUGH FTC’s
 23 CASE ON MOBILEWALLA (Dec. 3, 2024), <https://www.ftc.gov/policy/advocacy-research/tech-at-ftc/2024/12/unpacking-real-time-bidding-through-ftcs-case-mobilewalla>.

24 ⁴⁷ Geoghegan, *supra*.

25 ⁴⁸ DR. JOHNNY RYAN, “RTB” ADTECH & GDPR, <https://assortedmaterials.com/rtb-evidence/> (video).

Figure 7:

124. All of this is in line with protecting the right to determine who does and does not get to know one's information, a harm long recognized at common law and one the CIPA was enacted to protect against. *Ribas v. Clark*, 38 Cal. 3d 355 361 (1985) (noting the CIPA was drafted with a two-party consent requirement to protect “the right to control the nature and extent of the firsthand dissemination of [one’s] statements”); *U.S. Dep’t of Justice v. Reporters Comm. for Freedom of the Press* 489 U.S. 749, 763-64 (1989) (“[B]oth the common law and the literal understandings of privacy encompass the individual’s control of information concerning his or her person.”).

23 *Cookie Syncing*

24 125. It should now be clear both the capabilities of the Third Parties (i.e., data brokers, like Comscore, Nielsen and Magnite, who de-anonymize users, or companies who sync with data brokers for this purpose) and the reasons Defendant installs their Trackers on its Website. The final question is how do these Third Parties

1 share information amongst each other and with others to offer the most complete user
 2 profiles up for sale? This occurs through “cookie syncing.”

3 126. Cookie syncing is a process that “allow[s] web companies to share
 4 (synchronize) cookies and match the different IDs they assign for the same user while
 5 they browse the web.”⁴⁹ This allows entities like the Third Parties to circumvent “the
 6 restriction that sites can’t read each other cookies, in order to better facilitate targeting
 7 and real-time bidding.”⁵⁰

8 127. Cookie syncing (“CSync”) works as follows:

9 Let us assume a user browsing several domains like
 10 website1.com and website2.com, in which there are 3rd-parties
 11 like tracker.com and advertiser.com, respectively. Consequently,
 12 these two 3rd-parties have the chance to set their own cookies on
 13 the user’s browser, in order to re-identify the user in the future.
 Hence, tracker.com knows the user with the ID user123, and
 advertiser.com knows the same user with the ID userABC.

14 Now let us assume that the user lands on a website (say
 15 website3.com), which includes some JavaScript code from
 16 tracker.com but not from advertiser.com. Thus, advertiser.com
 17 does not (and cannot) know which users visit website3.com.
 18 However, *as soon as the code of tracker.com is called, a GET*
19 request is issued by the browser to tracker.com (step 1), and it
20 responds back with a REDIRECT request (step 2), instructing the
user’s browser to issue another GET request to its collaborator
advertiser.com this time, using a specifically crafted URL (step
3).

21
 22 ...
 23
 24 When advertiser.com receives the above request along with the
 cookie ID userABC, it finds out that userABC visited

25 ⁴⁹ Panagiotis Papadopoulos et al., *Cookie Synchronization: Everything You Always
 Wanted to Know But Were Afraid to Ask*, 1 WWW ‘19: THE WORLD WIDE WEB
 26 CONFERENCE 1432, 1432 (2019), <https://dl.acm.org/doi/10.1145/3308558.3313542>.

27 ⁵⁰ Gunes Acar et al., *The Web Never Forgets: Persistent Tracking Mechanisms in the
 Wild*, 6B CCS’14: ACM SIGSAC CONFERENCE ON COMPUTER AND
 28 COMMUNICATIONS SECURITY 674, 674 (2014).

1 website3.com. To make matters worse, advertiser.com also
 2 learns that the user whom tracker.com knows as user123, and
 3 the user userABC is basically one and the same user. Effectively,
 4 CSync enabled advertiser.com to collaborate with tracker.com,
 5 in order to: (i) find out which users visit website3.com, and (ii)
*synchronize (i.e., join) two different identities (cookies) of the
 same user on the web.*⁵¹

6 **Figure 8:**



21 128. Through this process, third party trackers are not only able to resolve user
 22 identities (e.g., learning that who Third Party #1 knew as “userABC” and Third Party #2
 23 knew as “user123” are the same person), they can “track a user to a much larger number
 24 of websites,” even though that “do not have any collaboration with” the third party.⁵²

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27 ⁵¹ Papadopoulos, *supra*, at 1433.

28 ⁵² Papadopoulos, *supra*, at 1434.

1 129. On the flip side, “CSync may re-identify web users even after they delete
 2 their cookies.”⁵³ “[W]hen a user erases her browser state and restarts browsing, trackers
 3 usually place and sync a new set of userIDs, and eventually reconstruct a new browsing
 4 history.”⁵⁴ But if a tracker can “respawn” its cookie or link to another persistent identifier
 5 (like an IP address), “then through CSync, all of them can link the user’s browsing
 6 histories from before and after her state erasure. Consequently: (i) users are not able to
 7 abolish their assigned userIDs even after carefully erasing their set cookies, and (ii)
 8 trackers are enabled to link user’s history across state resets.”⁵⁵

9 130. Thus, “syncing userIDs of a given user increases the user identifiability
 10 while browsing, thus reducing their overall anonymity on the Web.”⁵⁶

11 131. Cookie syncing is precisely what is happening here. When each of the
 12 Trackers are installed on Website users’ browsers, they are calling and/or syncing their
 13 cookies with other third parties on the Website. The result of this process is not only that
 14 a single user is identified as one person by these multiple third parties, but they share all
 15 of the information about that user with one another (because the cookie is linked to a
 16 specific user profile). This prevents users from being anonymous when they visit the
 17 Website.

18 132. To summarize the proceeding allegations, data brokers focus on collecting
 19 as much information about Website users as possible to create comprehensive user
 20 profiles, and the Trackers sync with numerous other data brokers that do the same. The
 21 Third Parties collect IP addresses, Device Metadata, User Information, and unique user
 22 IDs in the first instance, but those pieces of information are connected to information the
 23 Third Parties glean from other sources (e.g., various data brokers) to build
 24 comprehensive profiles. Through “cookie syncing,” those profiles are shared amongst

25
 26 ⁵³ *Id.*

27 ⁵⁴ *See id.*

28 ⁵⁵ *Id.*

29 ⁵⁶ *Id.* at 1441.

1 the Third Parties and with other entities to form the most fulsome picture with the most
2 attributes as possible. And those profiles are offered up for sale to interested advertisers
3 through real-time bidding using the Third Parties' trackers, where users will command
4 more value the more advertisers know about a user.

5 133. Thus, the Third Parties enrich the value Defendant's users would otherwise
6 command by tying the data they obtain directly from users on the Website (e.g., IP
7 addresses, Device Metadata, User Information, unique user IDs) with comprehensive
8 user profiles.

9 134. Accordingly, Defendant is using the Trackers in conjunction with the Third
10 Parties to (i) de-anonymize users, (ii) offer its users up for sale in real-time bidding, and
11 (iii) monetize its Website by installing the Trackers and allowing the Third Parties to
12 collect as much information about Website users as possible (without consent).

13 135. Thus, Defendant is unjustly enriched through their installation and use of
14 the Trackers, which causes data to be collected by Third Parties without Plaintiff's and
15 Class Members' consent, and that enable the Third Parties to sell Defendant's user
16 inventory in an ad-buying system. In addition, Plaintiff and Class Members lose the
17 ability to control their information, as their information ends up in the hands of data
18 brokers, advertising inventory sellers, and a virtually unlimited number advertisers
19 themselves without knowledge or consent.

20 136. When a user visits the Website, a suite of background tracking technologies
21 is activated immediately upon page load. These include client-side scripts deployed by
22 third-party Trackers, which begin collecting various categories of User Information
23 without any visible indication to the user. Together, these technologies function as a
24 coordinated data collection infrastructure that allows Defendant to analyze user behavior
25 at a highly granular level and to leverage that insight in real time for marketing
26 optimization, user targeting, and business intelligence.

27 137. On information and belief, the Trackers operate as part of a vast and
28 interconnected digital advertising ecosystem and these entities leverage shared

1 identifiers, cookie syncing, and cross-device tracking techniques to follow users across
2 websites, platforms, and environments, with tools specifically engineered to build
3 persistent consumer profiles, enabling real-time behavioral targeting and identity
4 resolution at scale.

5 138. Defendant deploys the Trackers to build a behavioral profiling and targeted
6 advertising system. Several of these trackers are dynamically injected into the Website
7 through tag management systems, initiating the collection of user behavior such as
8 pageviews, navigation patterns, and session metadata. Others are directly embedded into
9 the Website’s code, firing automatically upon page load. Together, these technologies
10 associate user behavior with device identifiers, cookies, and pseudonymous advertising
11 IDs, facilitating the construction of persistent user profiles for advertising and marketing
12 purposes.

13 139. The Trackers participate in programmatic advertising ecosystems by
14 capturing behavioral signals from the Website and linking them to advertising audiences.
15 These trackers enable personalized ad delivery based on users' site interactions and
16 associate browsing activity with broader ad networks through identifier syncing. Each
17 of these platforms sets or reads cookies to maintain persistent tracking across sessions
18 and domains, effectively participating in workflows designed to reidentify users and
19 expand behavioral audience segments for targeted advertising.

20 **G. Defendant Shared Plaintiff's Personal Behavioral Data With Third**
21 **Parties**

1 information associated with Plaintiff's visit. These parameters allowed Google's
2 systems to identify the specific page Plaintiff accessed, the homepage advertising units
3 rendered during the session, and the device characteristics reflected in the User-Agent
4 metadata transmitted with each request.

5 141. Plaintiff's device also communicated with Magnite, the operator of
6 fastlane.rubiconproject.com, prebid-a.rubiconproject.com, and
7 micro.rubiconproject.com, which function as part of the Website's header-bidding and
8 real-time auction framework. The transmissions to these domains included bidder-
9 context signals, ad-slot identifiers, and homepage-specific placement information,
10 enabling Magnite to evaluate or price the advertising inventory presented to Plaintiff
11 during her session. A similar set of disclosures occurred in communications with Xandr
12 through ib.adnxs.com, where the Website transmitted auction-related data and device
13 identifiers that allowed Xandr to participate in real-time bidding on homepage
14 advertising impressions.

15 142. Additional advertising systems engaged during Plaintiff's visit included
16 Yahoo Ads, through c2shb.pubgw.yahoo.com, which received homepage ad-slot data
17 and device metadata as part of the Website's advertising-delivery sequence. Kargo,
18 operating through krk2.kargo.com, similarly received request parameters reflecting the
19 placement and configuration of the homepage advertising containers and the
20 characteristics of Plaintiff's mobile device, which its platform uses to shape the
21 formatting and delivery of mobile ad creatives. The Website also transmitted homepage
22 advertising and resource-load data to 33Across via cdn-ima.33across.com, enabling that
23 platform to participate in the optimization or delivery of homepage advertising units
24 served to Plaintiff.

25 143. The Website further disclosed Plaintiff's device information and homepage
26 location to audience-measurement providers. Nielsen, operating through
27 imrworldwide.com domains, received requests containing Plaintiff's User-Agent fields
28 and the homepage URL, allowing its measurement systems to record the device type and

1 page accessed during the session. Comscore, through scorecardresearch.com and
2 sb.scorecardresearch.com, similarly received the homepage URL, referrer information,
3 and device metadata, enabling its measurement infrastructure to model or classify the
4 visit. Across all of these vendors, the transmitted data included the full homepage URL,
5 referrer headers, device-level identifiers, auction-context parameters, and homepage
6 advertising-slot attributes that were sent only because Defendant embedded these third-
7 party JavaScript frameworks into the Website and caused them to execute on Plaintiff's
8 device.

9 144. The data transmitted to these third parties was personal and behavioral in
10 nature because it identified the specific webpage Plaintiff accessed, revealed the
11 originating and destination locations of her browsing activity, and exposed detailed
12 information about the device she used to access the Website, including her browser
13 family, operating system characteristics, and mobile-specific identifiers contained in the
14 User-Agent fields. The data also included session-linking identifiers and ad-slot context
15 parameters that reflected Plaintiff's real-time interactions with the Website and the
16 advertising units rendered during her visit. Taken together, this information enabled
17 third-party advertising, auction, measurement, and analytics companies to recognize
18 Plaintiff's device across different sessions, associate the ESPN homepage visit with her
19 broader online activity, and model her behavior for purposes of ad-targeting,
20 measurement, or cross-site profile building. The disclosures therefore conveyed
21 individualized information about who was browsing, what page was being viewed, and
22 how Plaintiff's device interacted with the Website and its advertising systems,
23 constituting personal and behavioral data.

24 **V. SPECIFIC ALLEGATIONS**

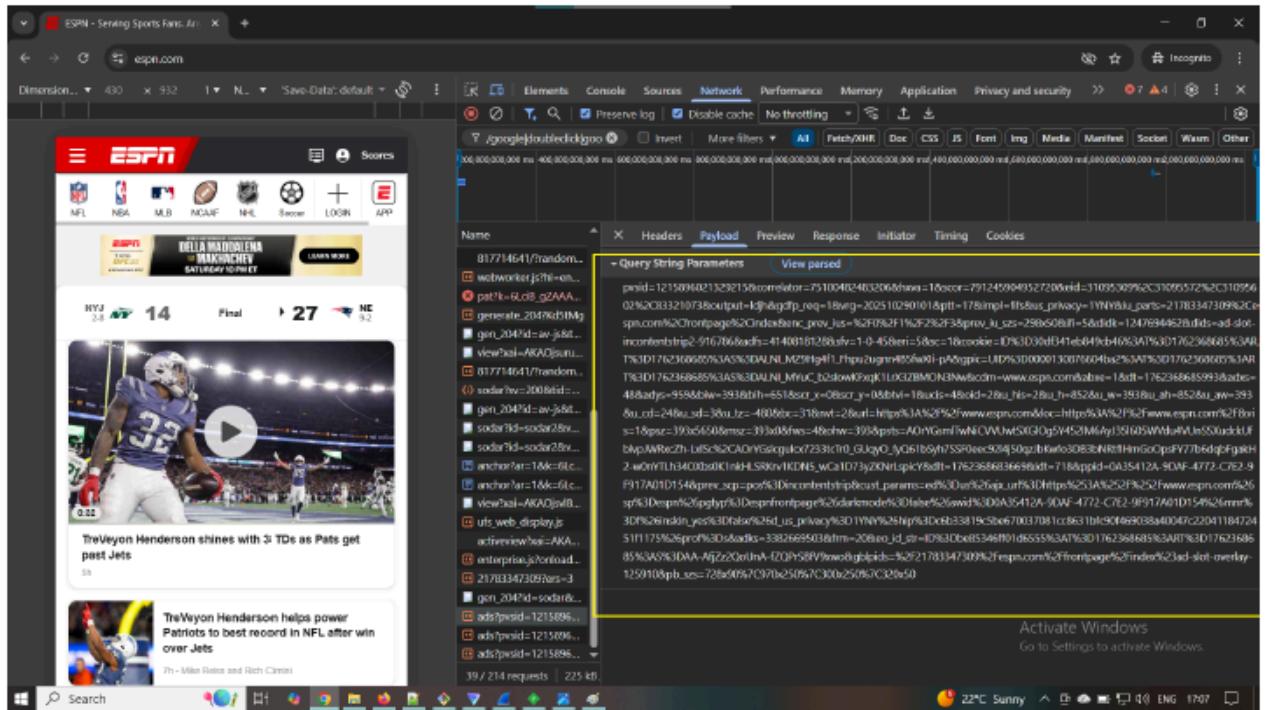
25 **A. Google Ads / DoubleClick / Tag Manager Tracker**

26 145. The Google Ads, DoubleClick, and Tag Manager technologies
27 (collectively, the "Google Tracker") are third-party advertising, measurement, and
28 behavioral-tracking systems operated by Google LLC. When implemented on a website,

1 these systems load and execute multiple JavaScript resources that cause a user's device
 2 to transmit signaling, routing, addressing, device-identification, and behavioral
 3 information directly to Google's servers.

4 146. As shown in Figure 9, immediately upon loading the Website Plaintiff's
 5 browser initiated outbound connections to Google's tracking and advertising
 6 infrastructure, including requests to googletagmanager.com, googleads.g.doubleclick.net, g.doubleclick.net, and googlesyndication.com. Figure A3
 7 shows that these transmissions occurred automatically at the outset of the session without
 8 any interaction or consent from the user because Defendant embedded code that caused
 9 Google's tracking endpoints to activate the moment the Website loaded.

10 **Figure 9:**

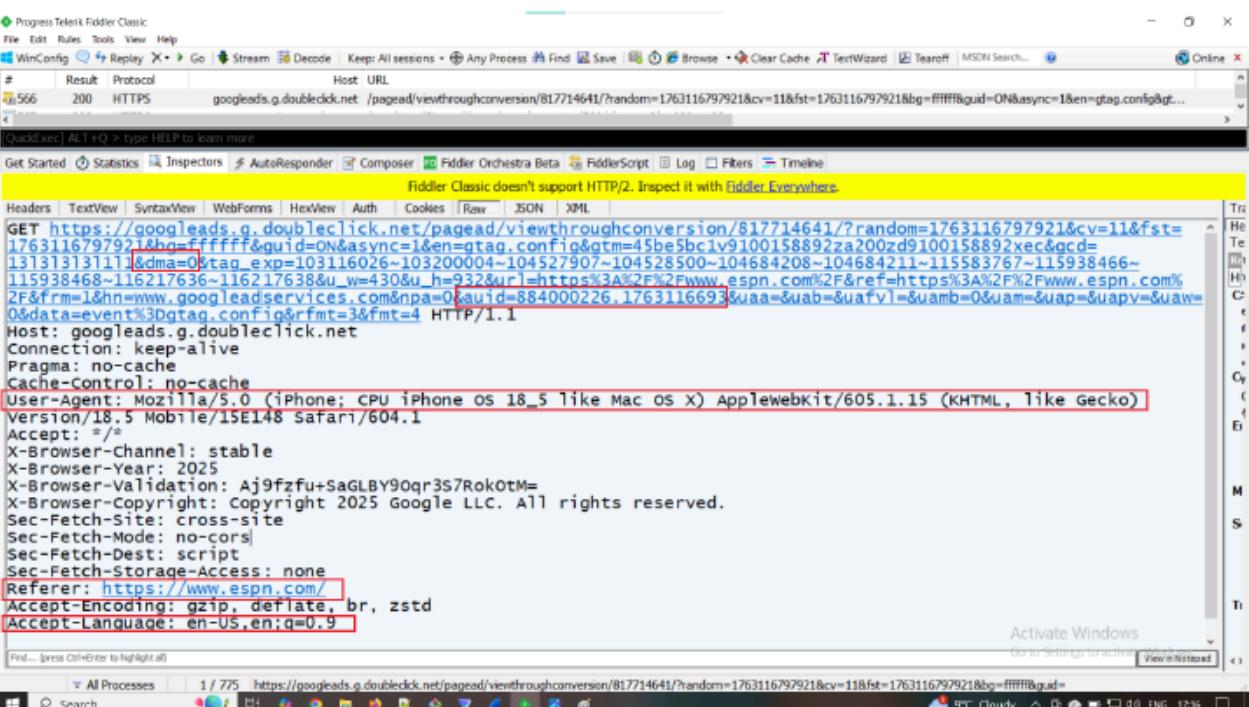


24 147. Once triggered, the Google Tracker transmitted detailed behavioral,
 25 contextual, and device-level metadata about the user's visit. Figure 9 shows unique
 26 identifiers (including pvsid and gcl_au), page-location fields identifying the specific
 27 ESPN page being viewed, referrer information, session-linking values, advertising-slot
 28 parameters, and device fingerprinting attributes contained within the User-Agent string.

1 These values reveal the nature of the page accessed, the advertising calls rendered during
 2 her visit, and the characteristics of the device from which the user accessed the Website.

3 148. Additional evidence of Google's data collection appears in Figure 10, which shows Google endpoints receiving the user's complete User-Agent string, full
 4 page URL, referrer headers, and IP-derived geolocation attributes (including dma).
 5 Figure 10 confirms that Google's infrastructure received the user's device and
 6 navigation information in clear form, including signals that allow Google to place the
 7 user's activity within a geographic region derived from the user's IP address.

9 **Figure 10:**

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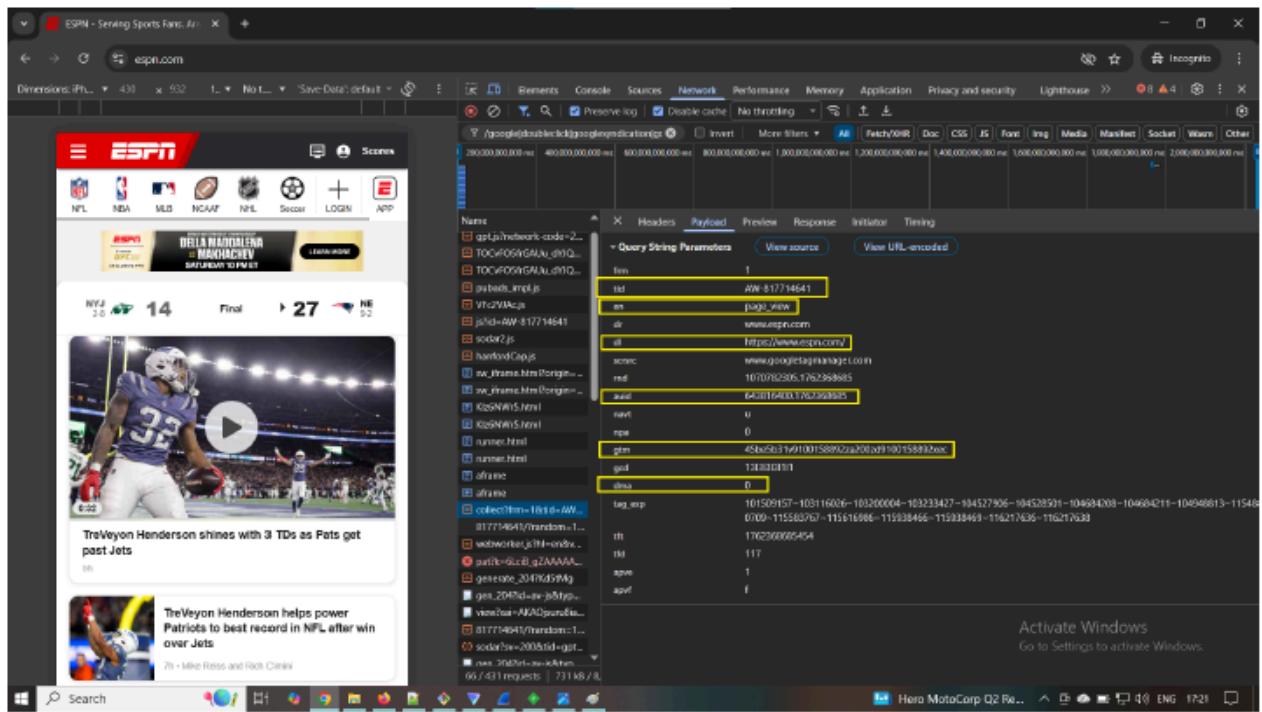
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22 149. Figure 11 further demonstrates Google's receipt of tracking, advertising,
 23 and analytics data generated by the Google Tracker. Figure 11 displays outbound
 24 "collect" requests containing page URL parameters (dl), referrer parameters (dr), Google
 25 identity tokens (including audid), and additional device and timing attributes that enable
 26 Google to recognize the user's device, connect sequential resource loads, and record the
 27 specific ESPN content rendered in the user's session.

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Figure 11:

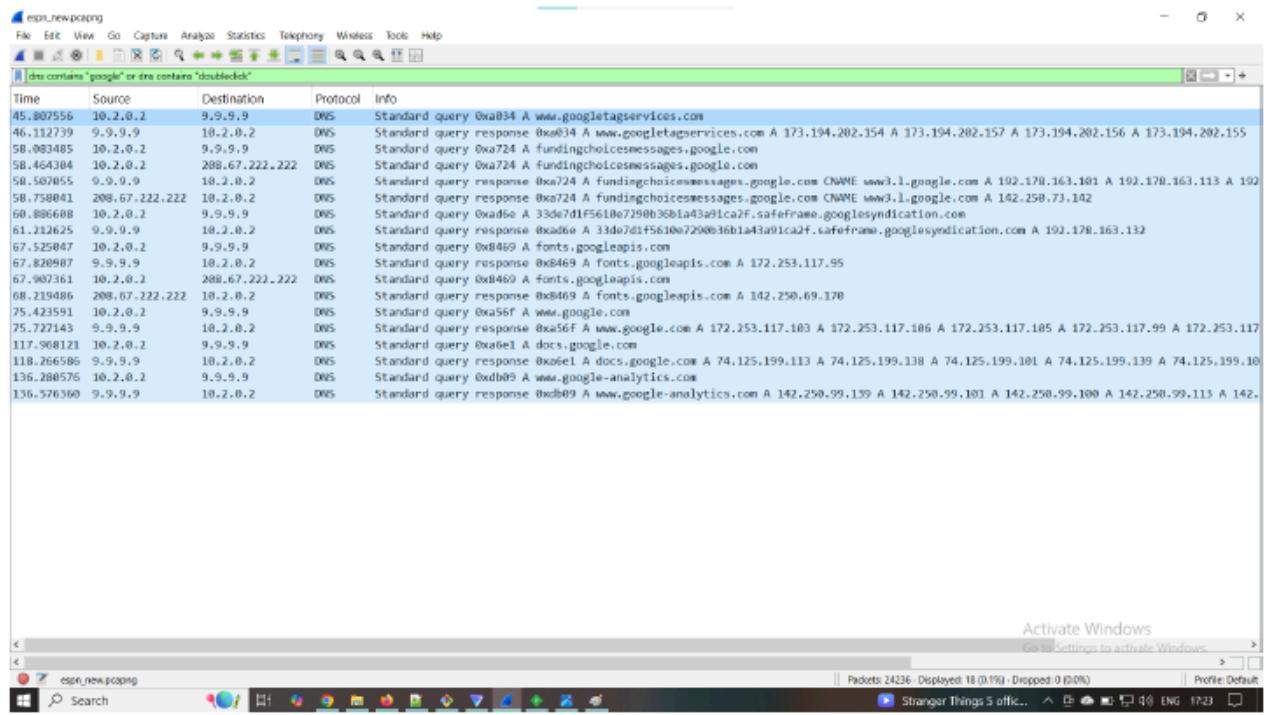
150. Figure 12 shows the DNS lookup process by which the user's actual source IP address was transmitted as part of the Website's connections to Google's tracking domains. In Figure 12, the user's source IP appears in the DNS requests resolving Google endpoints such as g.doubleclick.net, googleleads.g.doubleclick.net, and googletagmanager.com. This constitutes direct evidence that the user's IP address, an identifying, addressing, and routing value, was transmitted to Google's authoritative DNS infrastructure as a result of Defendant's tracking integrations.

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Figure 12:

151. Taken together, Figures 9 through 12 establish that Defendant designed the Website to automatically download and execute Google's tracking and advertising scripts, resulting in the transmission of Plaintiff's dialing, routing, addressing, device-identification, behavioral, and page-context information to Google. These transmissions include: (1) the user's source IP address, (2) device fingerprinting attributes, (3) unique Google identifiers, (4) page-location and referrer fields, and (5) advertising-slot and session-linking metadata. All such disclosures occurred automatically and without the user's knowledge or consent.

152. The Google Tracker constitute a "process" because it consists of software and scripts that operate on computing hardware to identify consumers, gather information, and correlate data across sessions. It also constitutes a "device," because it operates as software installed and executed on a user's device to collect information. See *James v. Walt Disney Co.*, 2023 WL 7392285, at *13 (N.D. Cal. Nov. 8, 2023).

153. The Google Tracker functions as a pen register and/or trap-and-trace device under Cal. Penal Code § 638.50 because it captures outgoing metadata including full

1 page URLs, referrer headers, timestamps, cookies, and advertising identifiers and
2 receive inbound server-address data and set-cookie information. These transmissions
3 constitute the acquisition of addressing, signaling, routing, and device-identification
4 information as defined by § 638.51.

5 154. Defendant did not obtain a court order authorizing the use of a pen register
6 or trap-and-trace device and did not obtain Plaintiff's or Class Members' consent for the
7 installation or operation of the Google Tracker.

8 155. By embedding and enabling Google Tracker without user consent or
9 judicial authorization, Defendant violated Cal. Penal Code § 638.51.

10 **B. The Magnite Tracker**

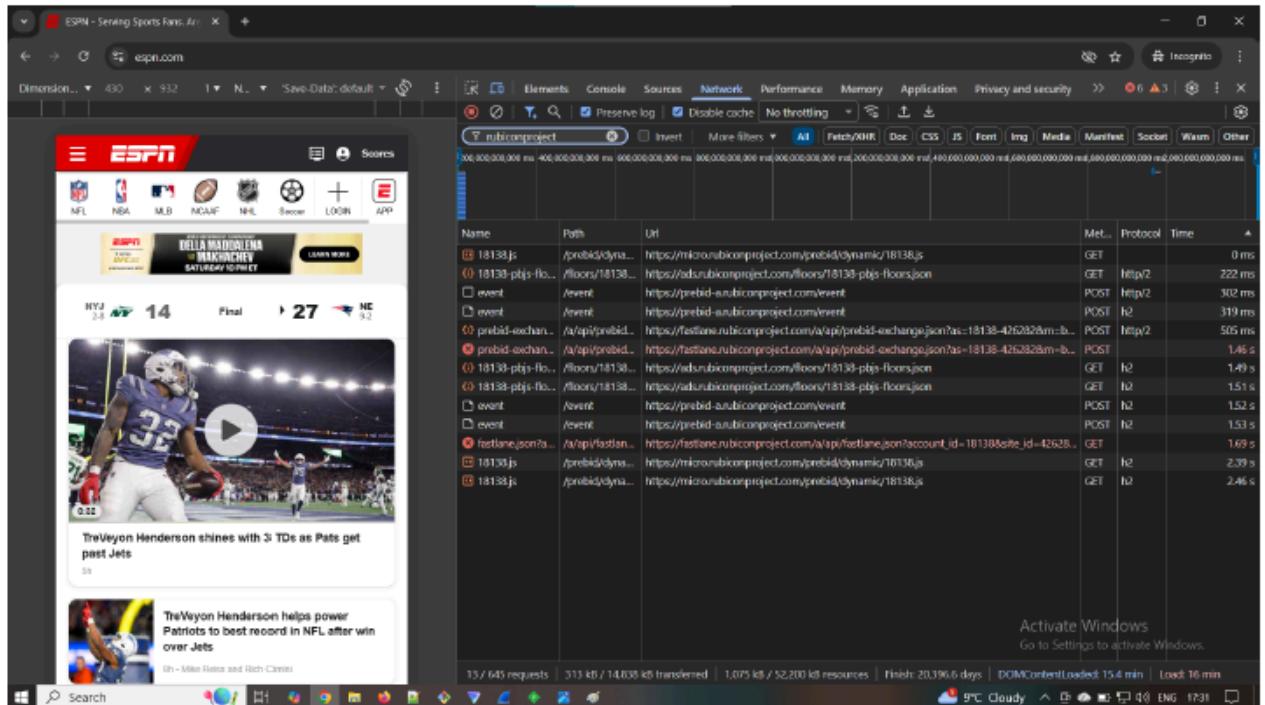
11 156. Rubicon Project (Magnite) operates the Website's supply-side advertising
12 exchange and Prebid auction infrastructure. When embedded on a website, Magnite's
13 scripts load automatically and transmit signaling, routing, addressing, device, and
14 behavioral information to Magnite's servers for real-time bidding, impression valuation,
15 and cross-exchange identity synchronization.

16 157. As shown in Figure 13, immediately upon loading the Website the browser
17 triggered connections to multiple Magnite endpoints, including
18 micro.rubiconproject.com, ads.rubiconproject.com, fastlane.rubiconproject.com, and
19 prebid-a.rubiconproject.com. These requests executed within milliseconds of navigating
20 to espn.com, confirming that Defendant configured the Website so that Magnite's
21 tracking and bidding systems activate automatically without any user interaction or
22 consent.

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Figure 13:

158. Once initialized, the Magnite integration transmitted detailed device, browser, and contextual data. Figure 14 shows Rubicon receiving (1) viewport width and height, (2) renderable area dimensions (vpw, vph), (3) language settings, (4) a full mobile User-Agent string, (5) ESPN's publisher domain and page URL (<https://www.espn.com/>), and (6) a us_privacy value of "1YNY" indicating no consent. These parameters reflect device fingerprinting, locale identification, and behavioral context, none of which are required for routing or transport but are used by Magnite to segment, classify, and bid on the user's advertising impressions.

159. The Rubicon integration also transmitted detailed device, browser, and contextual data. Figure 15 shows Rubicon receiving (1) viewport width and height, (2) renderable area dimensions (vpw, vph), (3) language settings, (4) a full mobile User-Agent string, (5) ESPN's publisher domain and page URL (<https://www.espn.com/>), and (6) a us_privacy value of "1YNY" indicating no consent. These parameters reflect device fingerprinting, locale identification, and behavioral context, none of which are required for routing or transport but are used by Magnite to segment, classify, and bid on the user's advertising impressions.

160. The Rubicon integration also transmitted detailed device, browser, and contextual data. Figure 16 shows Rubicon receiving (1) viewport width and height, (2) renderable area dimensions (vpw, vph), (3) language settings, (4) a full mobile User-Agent string, (5) ESPN's publisher domain and page URL (<https://www.espn.com/>), and (6) a us_privacy value of "1YNY" indicating no consent. These parameters reflect device fingerprinting, locale identification, and behavioral context, none of which are required for routing or transport but are used by Magnite to segment, classify, and bid on the user's advertising impressions.

161. The Rubicon integration also transmitted detailed device, browser, and contextual data. Figure 17 shows Rubicon receiving (1) viewport width and height, (2) renderable area dimensions (vpw, vph), (3) language settings, (4) a full mobile User-Agent string, (5) ESPN's publisher domain and page URL (<https://www.espn.com/>), and (6) a us_privacy value of "1YNY" indicating no consent. These parameters reflect device fingerprinting, locale identification, and behavioral context, none of which are required for routing or transport but are used by Magnite to segment, classify, and bid on the user's advertising impressions.

162. The Rubicon integration also transmitted detailed device, browser, and contextual data. Figure 18 shows Rubicon receiving (1) viewport width and height, (2) renderable area dimensions (vpw, vph), (3) language settings, (4) a full mobile User-Agent string, (5) ESPN's publisher domain and page URL (<https://www.espn.com/>), and (6) a us_privacy value of "1YNY" indicating no consent. These parameters reflect device fingerprinting, locale identification, and behavioral context, none of which are required for routing or transport but are used by Magnite to segment, classify, and bid on the user's advertising impressions.

163. The Rubicon integration also transmitted detailed device, browser, and contextual data. Figure 19 shows Rubicon receiving (1) viewport width and height, (2) renderable area dimensions (vpw, vph), (3) language settings, (4) a full mobile User-Agent string, (5) ESPN's publisher domain and page URL (<https://www.espn.com/>), and (6) a us_privacy value of "1YNY" indicating no consent. These parameters reflect device fingerprinting, locale identification, and behavioral context, none of which are required for routing or transport but are used by Magnite to segment, classify, and bid on the user's advertising impressions.

164. The Rubicon integration also transmitted detailed device, browser, and contextual data. Figure 20 shows Rubicon receiving (1) viewport width and height, (2) renderable area dimensions (vpw, vph), (3) language settings, (4) a full mobile User-Agent string, (5) ESPN's publisher domain and page URL (<https://www.espn.com/>), and (6) a us_privacy value of "1YNY" indicating no consent. These parameters reflect device fingerprinting, locale identification, and behavioral context, none of which are required for routing or transport but are used by Magnite to segment, classify, and bid on the user's advertising impressions.

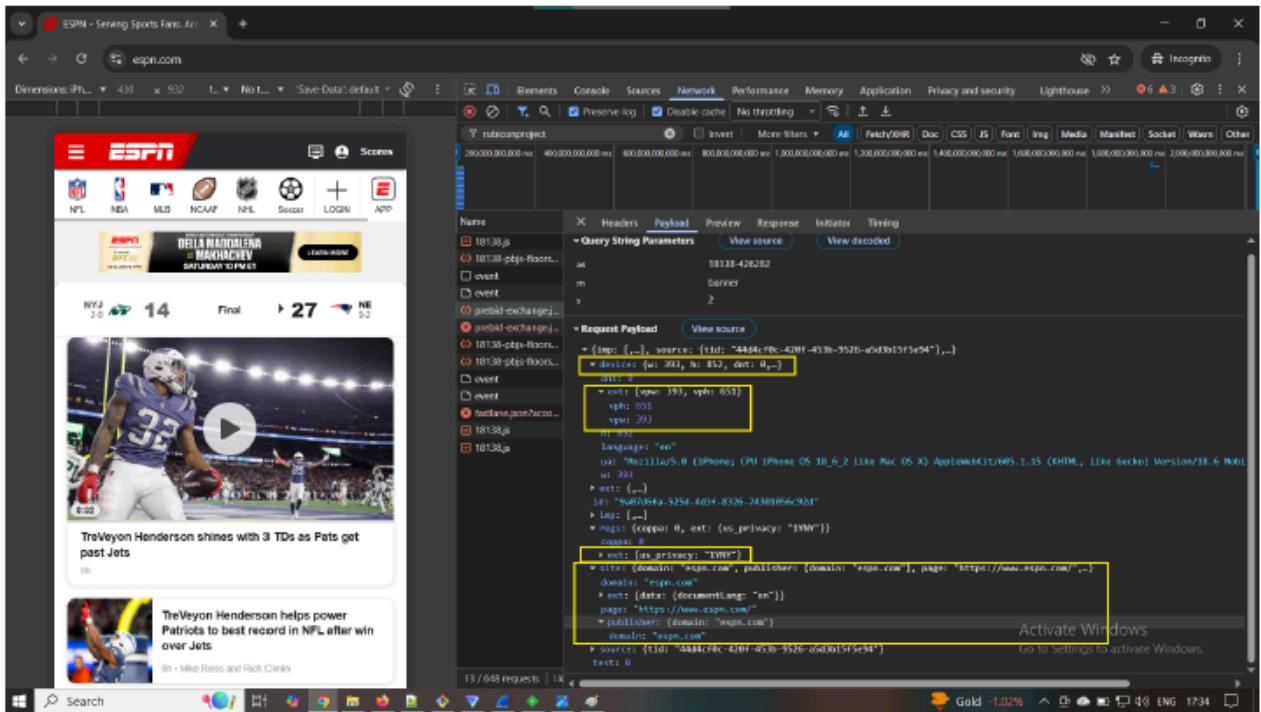
165. The Rubicon integration also transmitted detailed device, browser, and contextual data. Figure 21 shows Rubicon receiving (1) viewport width and height, (2) renderable area dimensions (vpw, vph), (3) language settings, (4) a full mobile User-Agent string, (5) ESPN's publisher domain and page URL (<https://www.espn.com/>), and (6) a us_privacy value of "1YNY" indicating no consent. These parameters reflect device fingerprinting, locale identification, and behavioral context, none of which are required for routing or transport but are used by Magnite to segment, classify, and bid on the user's advertising impressions.

166. The Rubicon integration also transmitted detailed device, browser, and contextual data. Figure 22 shows Rubicon receiving (1) viewport width and height, (2) renderable area dimensions (vpw, vph), (3) language settings, (4) a full mobile User-Agent string, (5) ESPN's publisher domain and page URL (<https://www.espn.com/>), and (6) a us_privacy value of "1YNY" indicating no consent. These parameters reflect device fingerprinting, locale identification, and behavioral context, none of which are required for routing or transport but are used by Magnite to segment, classify, and bid on the user's advertising impressions.

167. The Rubicon integration also transmitted detailed device, browser, and contextual data. Figure 23 shows Rubicon receiving (1) viewport width and height, (2) renderable area dimensions (vpw, vph), (3) language settings, (4) a full mobile User-Agent string, (5) ESPN's publisher domain and page URL (<https://www.espn.com/>), and (6) a us_privacy value of "1YNY" indicating no consent. These parameters reflect device fingerprinting, locale identification, and behavioral context, none of which are required for routing or transport but are used by Magnite to segment, classify, and bid on the user's advertising impressions.

168. The Rubicon integration also transmitted detailed device, browser, and contextual data. Figure 24 shows Rubicon receiving (1) viewport width and height, (2) renderable area dimensions (vpw, vph), (3) language settings, (4) a full mobile User-Agent string, (5) ESPN's publisher domain and page URL (<https://www.espn.com/>), and (6) a us_privacy value of "1YNY" indicating no consent. These parameters reflect device fingerprinting, locale identification, and behavioral context, none of which are required for routing or transport but are used by Magnite to segment, classify, and bid on the user's advertising impressions.

Figure 14:



159. Figure 15 captures Magnite’s generation and exchange of identity signals during the same session. Magnite created and received a sessionId, a pageview identifier (pvid), an auctionId, and a transactionId, along with adUnitCodes and a bidderOrder list identifying downstream partners (trustx, rubicon, yahoossp, ix, appnexus, kargo). These identifiers allow Rubicon to recognize the visitor within a session, link impressions across auctions, and coordinate with other bidding platforms. Their automatic creation demonstrates intentional identity-acquisition functionality rather than mere transmission of routing information.

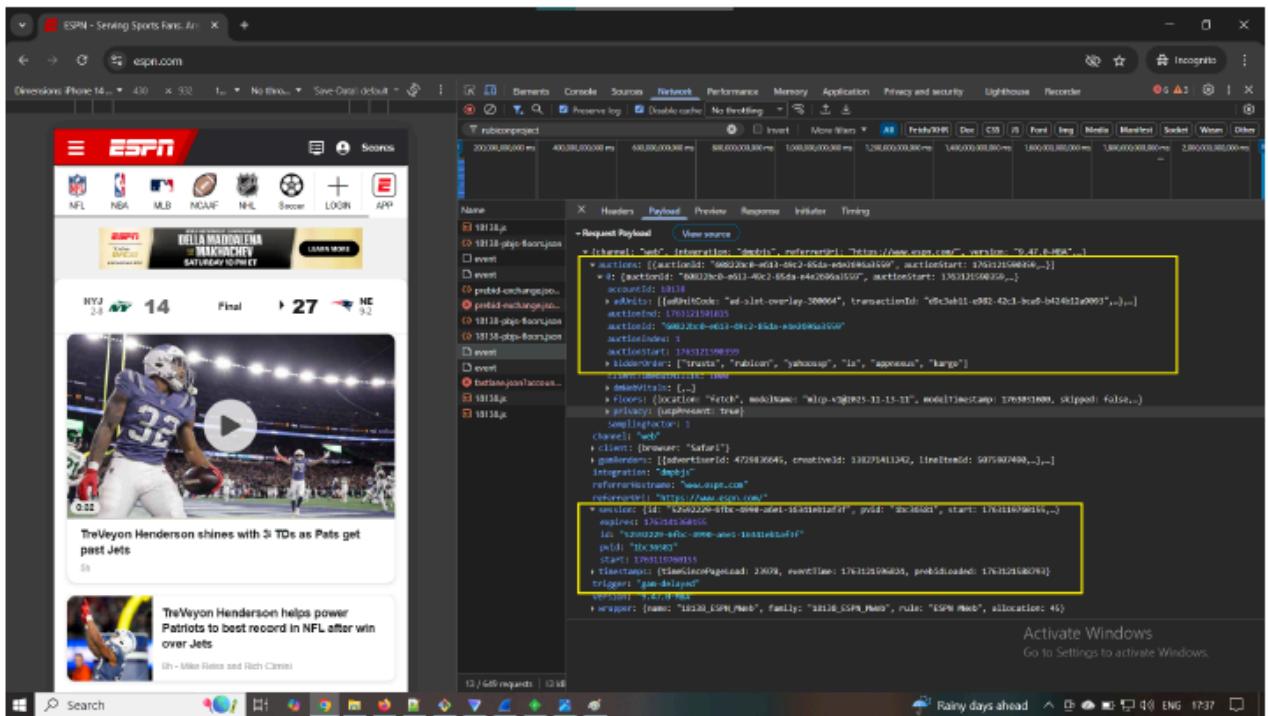
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Figure 15:

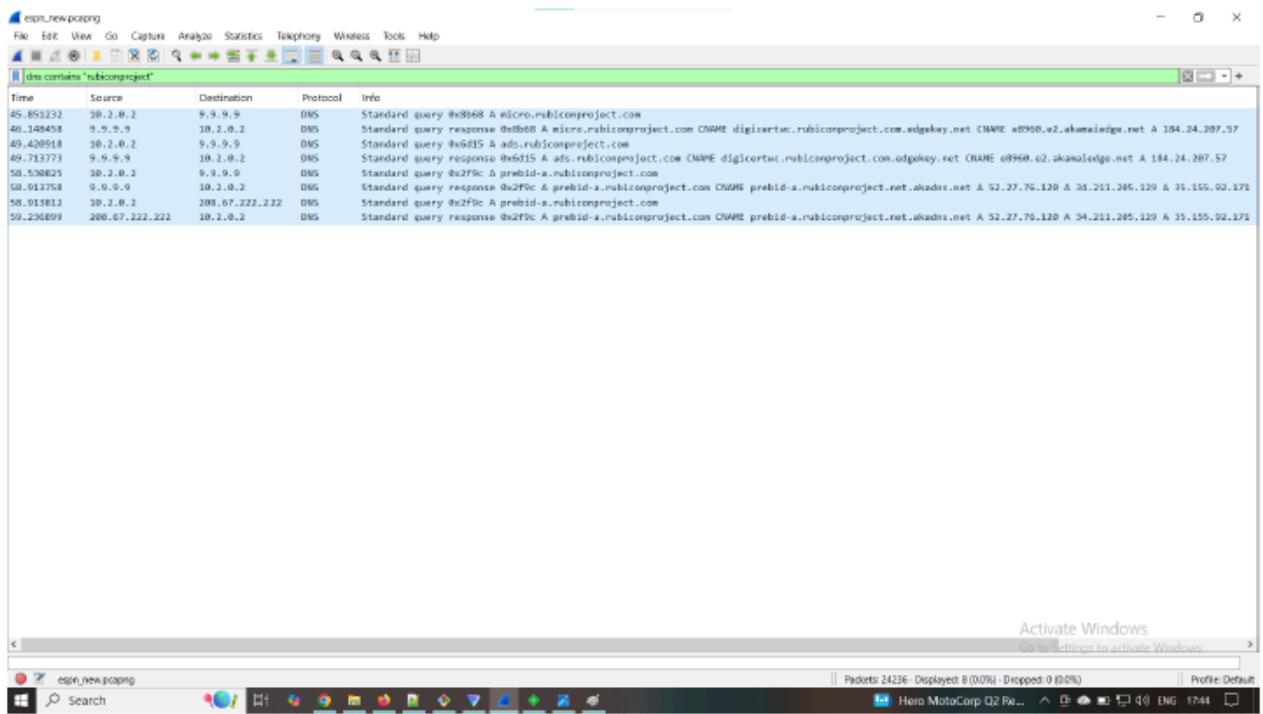


160. Critically, **Figure 16** shows the DNS lookup process in which the client's actual source IP address (10.2.0.2) was transmitted to resolve Magnite domains, including micro.rubiconproject.com, ads.rubiconproject.com, and prebid-a.rubiconproject.com. These DNS requests occurred during the Website's loading sequence and before any consent was displayed, providing direct evidence that Plaintiff's IP-addressing information was sent to Magnite's infrastructure as part of Defendant's tracking and bidding integrations.

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Figure 16:

161. Figures 13 through 16 collectively establish that Defendant designed the Website to automatically load and execute Magnite’s Prebid and exchange scripts, causing the user’s device to transmit (1) the source IP address, (2) device fingerprinting attributes, (3) page-context metadata, (4) User-Agent information, (5) consent-state values, and (6) multiple persistent identifiers linking the visit to Rubicon’s real-time bidding ecosystem. These transmissions reveal personal behavioral information including the ESPN homepage context associated with the user’s visit and identifying signals used by Magnite to track, classify, price, and synchronize impressions across partner platforms.

162. The Magnite tracking and bidding infrastructure constitutes a “process” because it consists of software and scripts that operate on computing hardware to identify consumers, gather information, and correlate that information across requests and auctions. Magnite’s integrations function only when their JavaScript code executes on a user’s device and collects data describing the user’s device, ad-slot context, identity tokens, and session-level metadata. The Magnite codebase also constitutes a “device,”

1 because it operates through software installed and executed on Plaintiff's device for the
 2 purpose of collecting information. See *James v. Walt Disney Co.*, 2023 WL 7392285, at
 3 *13 (N.D. Cal. Nov. 8, 2023).

4 163. Magnite's tracking and bidding scripts function as a pen register and/or
 5 trap-and-trace device under Cal. Penal Code § 638.50 because they capture outgoing
 6 metadata including full page URLs, referrer information, timestamps, device
 7 fingerprints, consent-state fields, auction identifiers, and other signaling parameters and
 8 receive inbound server-address data, identity tokens, and auction-response metadata,
 9 which constitutes the acquisition of "dialing, routing, addressing, and signaling
 10 information" within the meaning of § 638.51.

11 164. Defendant did not obtain a court order authorizing the use of a pen register
 12 or trap-and-trace device and did not obtain Plaintiff's or any Class Member's consent
 13 for the installation, activation, or operation of the Magnite tracking, bidding, identity-
 14 generation, or auction-synchronization scripts at issue.

15 165. By embedding and enabling Magnite's bidding systems without user
 16 consent or judicial authorization, and by causing Plaintiff's device to transmit her IP
 17 address, device-fingerprinting data, page-context information, session identifiers, and
 18 auction-context metadata to Magnite, Defendant violated Cal. Penal Code § 638.51.

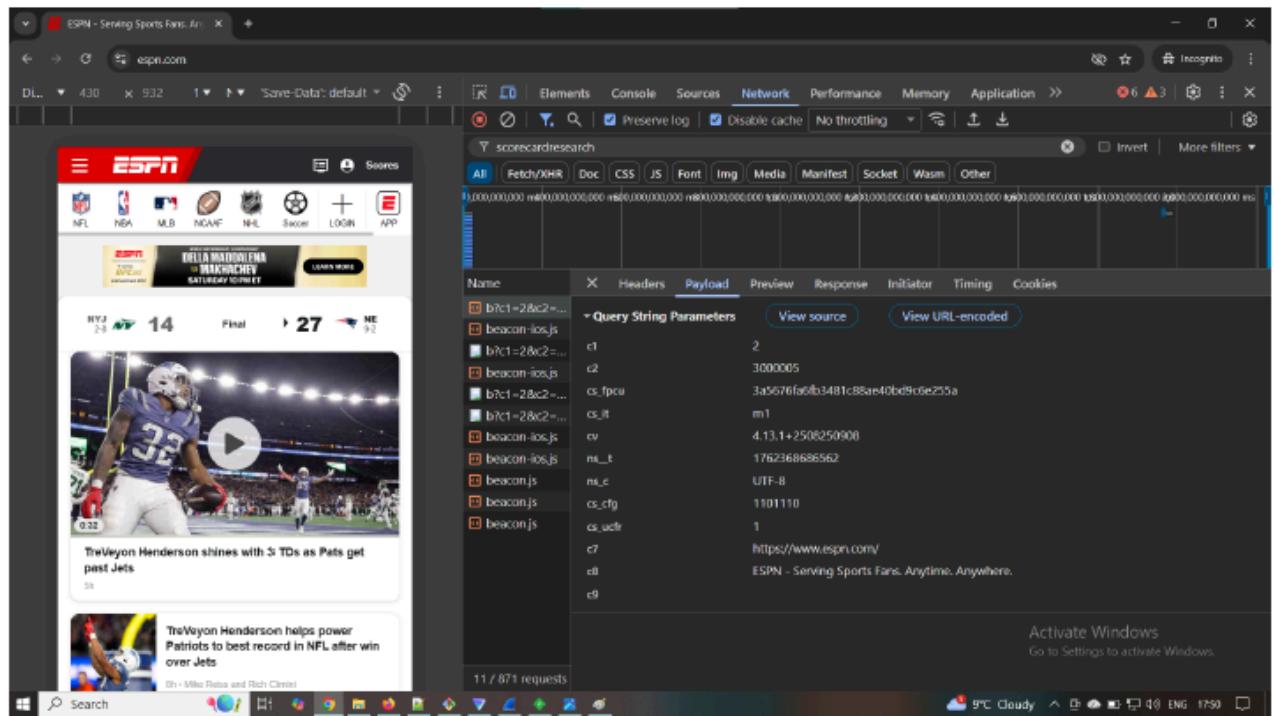
19 **C. The Comscore Tracker**

20 166. Comscore provides the Website's third-party behavioral-measurement and
 21 audience-tracking systems through scorecardresearch.com and
 22 sb.scorecardresearch.com. These systems function as cross-site tracking technologies
 23 that collect signaling, routing, addressing, device, and navigation information whenever
 24 a website embeds Comscore's measurement beacons.

25 167. As shown in Figure 17, the Website caused Comscore's tracking endpoints
 26 to activate immediately when the user accessed the page. Without any interaction or
 27 consent, Comscore received the full URL of the ESPN page the user visited, referrer
 28 information identifying that same page as the source of the request, and session-level

1 measurement parameters. These fields reveal exactly which ESPN page the user
 2 accessed and the navigation context associated with that visit.

3 **Figure 17:**

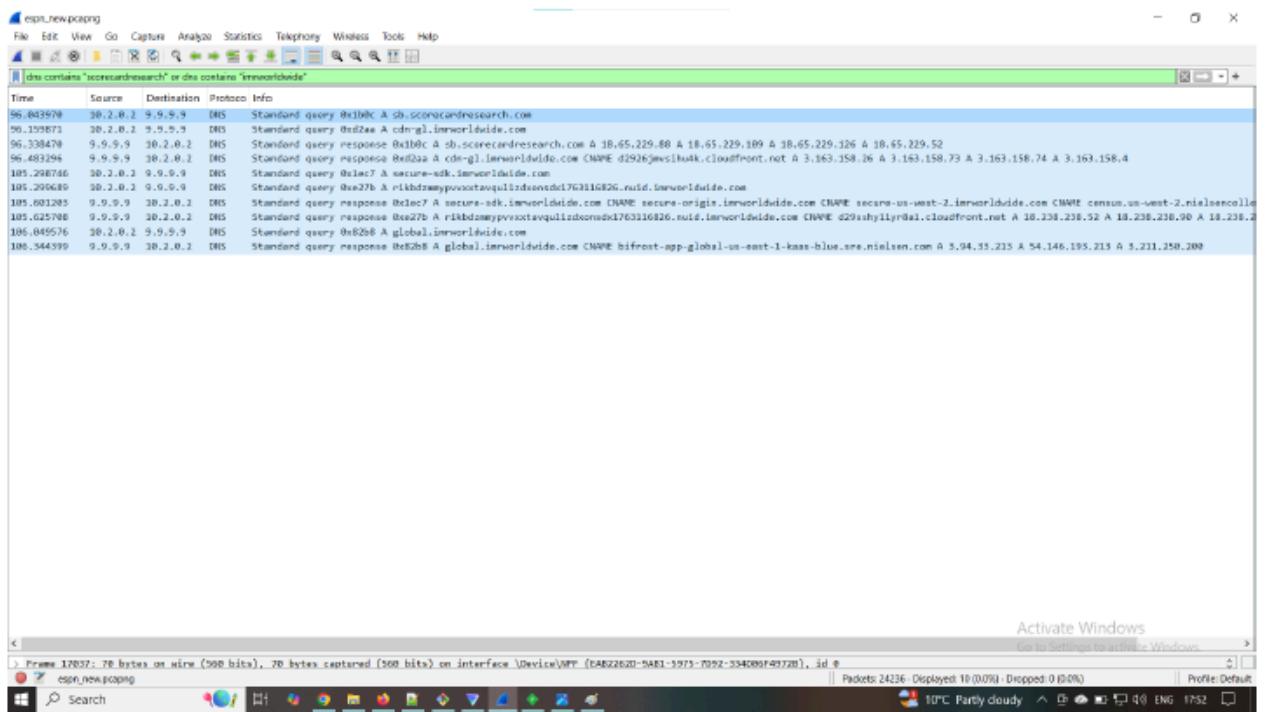


168. Additional evidence of Comscore's data collection appears in Figure 18, which shows Comscore receiving the user's complete User-Agent string, operating-system indicators, browser family, locale, and other device-fingerprinting attributes. These values identify the type of device the user was operating, the software environment running on it, and the technical characteristics of the user's browser—allowing Comscore to classify the user's device and associate the session with Comscore's broader cross-property measurement systems.

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Figure 18:

169. Figure 19 captures the DNS resolution process in which the user's source IP address was transmitted to resolve Comscore's tracking domains. The DNS timeline in Figure C6 shows the user's IP address being sent to the authoritative DNS servers for scorecardresearch.com and sb.scorecardresearch.com, confirming that Comscore received the user's dialing, routing, and addressing information as part of the Website's tracking operations.

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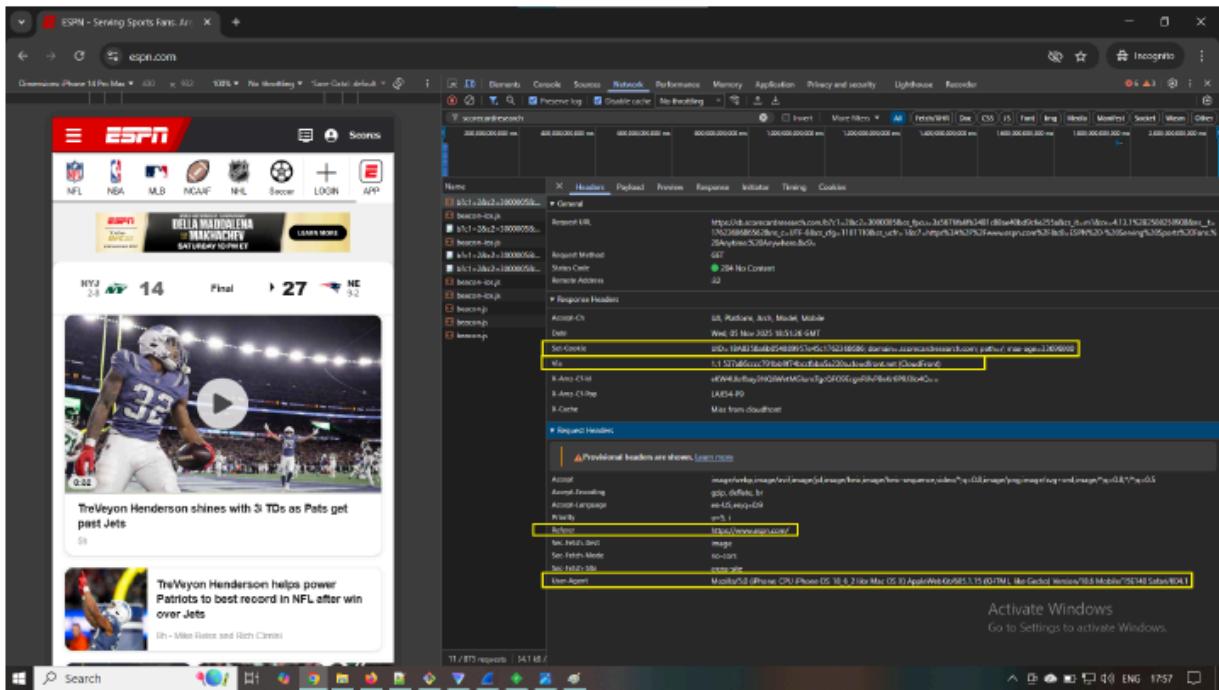
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5 **Figure 19:**
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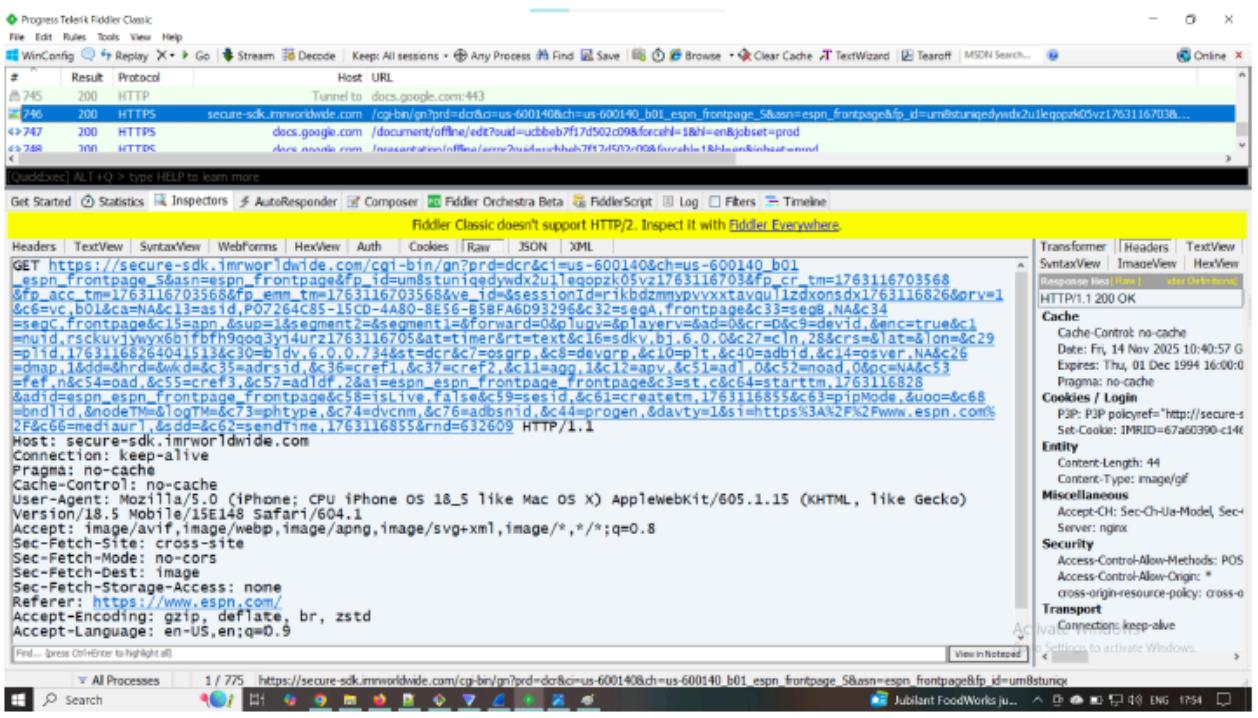
14 170. Further evidence of Comscore's data collection appears in Figure 20, a real-
 15 time HTTP transaction capture generated through Fiddler, which records packet-level
 16 request metadata as it leaves the user's device. Figure C5(a) shows that Comscore
 17 received the user's full User-Agent string, the ESPN homepage URL, the referrer
 18 associated with that page, language settings, operating-system information, and
 19 additional device-fingerprinting fields. These packet-level request details confirm that
 20 the Website caused the user's browser to transmit uniquely identifying device metadata
 21 and specific page-context information directly to Comscore's servers.

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Figure 20:


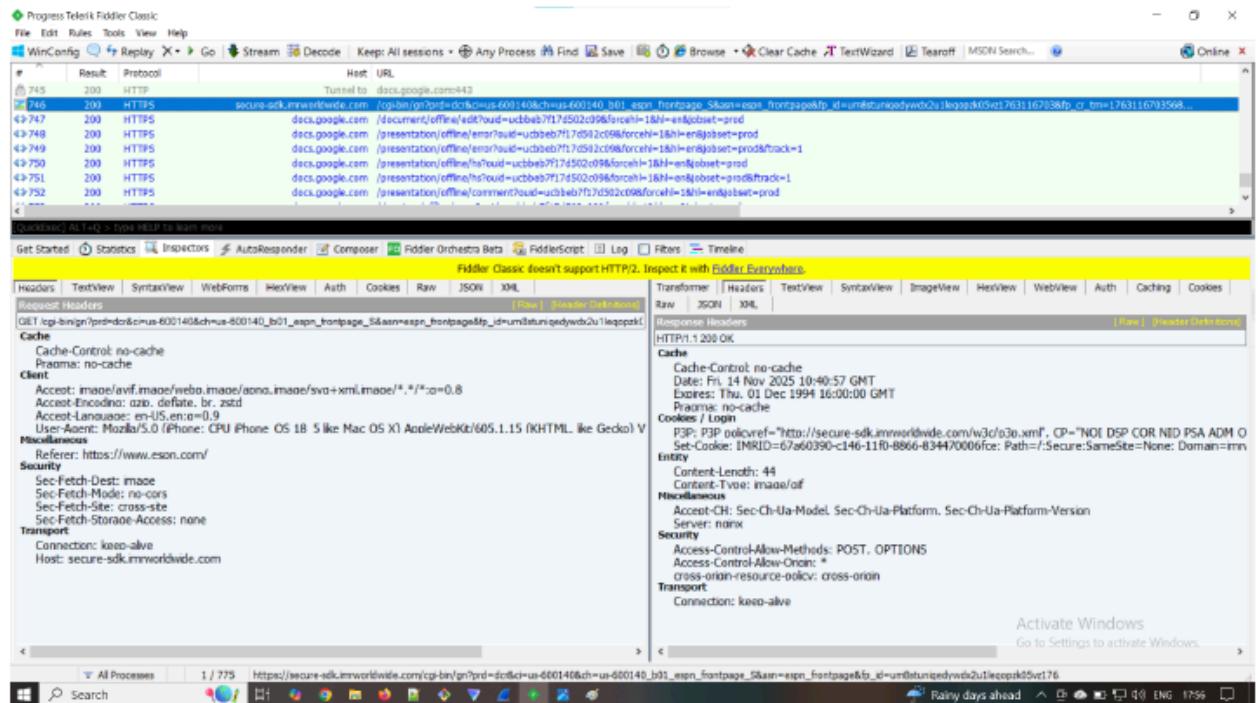
171. Figure 21, also captured through Fiddler, shows the corresponding packet-level HTTP response from Comscore's infrastructure. This response contains Comscore's tracking instructions, measurement tokens, and additional identifiers generated by Comscore's servers as part of the same transaction. The presence of these identifiers in the response confirms a completed two-way exchange between the user's device and Comscore, in which Comscore both received the user's device and navigation metadata and transmitted server-side identifiers back to the user for continued tracking and measurement.

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Figure 21:

172. The Comscore evidence demonstrates that Defendant designed the Website so that Comscore's tracking infrastructure would activate automatically upon the user's arrival, causing the user's device to transmit her full page-location and referrer information, complete device-fingerprinting attributes, session-level measurement parameters, and her source IP address to Comscore's servers and DNS infrastructure. Figures 17 and 18 show the transmission of detailed behavioral, navigational, and device-identifying metadata; Figures 20 and 21 provide real-time packet-level confirmation of the HTTP requests and responses exchanged with Comscore; and Figure 19 confirms that the user's IP address was communicated during DNS resolution for Comscore's tracking domains. Taken together, these transmissions reveal personal behavioral information about the user's interaction with the Website and identifying information about the device she used, all of which were acquired by Comscore as a direct result of Defendant's embedded tracking scripts operating without the user's knowledge or consent.

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173. The Comscore tracking code constitutes a “process” because it consists of software and scripts that execute on a user’s device to identify the user, gather information about the user and the user’s device, and correlate that information across sessions. It also constitutes a “device,” because it functions as software installed and executed on computing equipment for the purpose of collecting information. See *James v. Walt Disney Co.*, 2023 WL 7392285, at *13 (N.D. Cal. Nov. 8, 2023).

174. Comscore's tracking beacons function as a pen register and/or trap-and-trace device under Cal. Penal Code § 638.50 because they capture outgoing metadata including full page URLs, referrer headers, timestamps, cookies, and browser-level identifiers and receive inbound server-address data and set-cookie information. These exchanges constitute the acquisition of addressing, signaling, routing, and device-identification information prohibited by § 638.51.

175. Defendant did not obtain a court order authorizing the installation or operation of a pen register or trap-and-trace device and did not obtain the user's consent for the activation of Comscore's tracking systems.

176. By embedding and enabling Comscore's scorecardresearch.com and sb.scorecardresearch.com tracking code without the user's consent or judicial authorization, Defendant violated Cal. Penal Code § 638.51

VI. CLASS ALLEGATIONS

177. Plaintiff brings this action individually and on behalf of all others similarly situated (the “Class” or “Class Members”) defined as follows:

All persons within California whose browser was subject to installation, execution, embedding, or injection of the Trackers by the Defendant's Website during the relevant statute of limitations period.

178. **NUMEROSITY:** Plaintiff does not know the number of Class Members but believes the number to be in the thousands, if not more. The exact identities of Class Members can be ascertained by the records maintained by Defendant.

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1 179. **COMMONALITY:** Common questions of fact and law exist as to all Class
 2 Members and predominate over any questions affecting only individual members of the
 3 Class. Such common legal and factual questions, which do not vary between Class
 4 members, and which may be determined without reference to the individual
 5 circumstances of any Class Member, include but are not limited to the following:

- 6 • Whether Defendant installed, executed, embedded or injected the
 Trackers on the Website;
- 7 • Whether the Trackers are each a pen register and/or trap and trace
 device as defined by law;
- 8 • Whether Plaintiff and Class Members are subject to same tracking
 policies and practices;
- 9 • Whether Plaintiff and Class Members are entitled to statutory
 damages;
- 10 • Whether Class Members are entitled to injunctive relief; and
- 11 • Whether the Defendant's conduct violates CIPA.

12 180. **TYPICALITY:** As a person who visited Defendant's Website and whose
 13 outgoing electronic information was surreptitiously collected by the Trackers, Plaintiff
 14 is asserting claims that are typical of the Class Members. Plaintiff's experience with the
 15 Trackers is typical to Class Members.

16 181. **ADEQUACY:** Plaintiff will fairly and adequately protect the interests of
 17 the members of the Class. Plaintiff has retained attorneys experienced in class action
 18 litigation. All individuals with interests that are actually or potentially adverse to or in
 19 conflict with the Class or whose inclusion would otherwise be improper are excluded.

20 182. **SUPERIORITY:** A class action is superior to other available methods of
 21 adjudication because individual litigation of the claims of all Class Members is
 22 impracticable and inefficient. Even if every Class Member could afford individual
 23 litigation, the court system could not. It would be unduly burdensome to the courts in
 24 which individual litigation of numerous cases would proceed.

VII. FIRST CAUSE OF ACTION

Violations of Cal. Penal Code § 638.51

By Plaintiff and the Class Members Against Defendant

183. Plaintiff reasserts and incorporates by reference the allegations set forth in each preceding paragraph as though fully set forth herein.

184. Plaintiff brings this claim individually and on behalf of the members of the proposed Class against Defendant.

185. Defendant uses a pen register device or process and/or a trap and trace device or process on its Website by deploying the Trackers because the Trackers are designed to capture the IP address, User Information and other information such as the phone number, email, routing, addressing and/or other signaling information of website visitors.

186. Defendant did not obtain consent from Plaintiff or any of the Class Members before using pen registers or trap and trace devices to locate or identify users of its Website and has thus violated CIPA. CIPA imposes civil liability and statutory penalties for violations of § 638.51. Cal. Penal Code § 637.2; Moody v. C2 Educational Systems, Inc., No. 2:24-cv-04249-RGK-SK, 2024 U.S. Dist. LEXIS 132614 (C.D. Cal. July 25, 2024).

VIII. PRAYER FOR RELIEF

WHEREFORE, Plaintiff prays for the following:

1. An order certifying the Class, naming Plaintiff as Class representative, and naming Plaintiff's attorneys as Class counsel;
2. An order declaring that Defendant's conduct violates CIPA;
3. An order of judgment in favor of Plaintiff and the Class against Defendant on the causes of action asserted herein;
4. An order enjoining Defendant's conduct as alleged herein;
5. Statutory damages pursuant to CIPA;
6. Prejudgment interest;

7. Reasonable attorney's fees and costs; and
8. All other relief that would be just and proper as a matter of law or equity.

DEMAND FOR JURY TRIAL

Plaintiff hereby demands a trial by jury on all claims so permitted.

Dated: December 26, 2025

Respectfully submitted,

NATHAN & ASSOCIATES, APC

By: /s/ Reuben D. Nathan

Reuben D. Nathan

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Attorneys for Plaintiff

ClassAction.org

This complaint is part of ClassAction.org's searchable class action lawsuit database and can be found in this post: [Disney Deploys Third-Party Data Trackers on ESPN Website Without User Consent, Class Action Claims](#)
